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## PERSONAL.

Mr. George V. Lorings has been appointed City Engineer of Decatur, Ill., to succeed Mr. Dickerson, resigned.

Mr. E. Anderson has been appointed City Electrician and Chief Engineer of the water and electric light plants of Grand Forks, B. C.

Mr. Charles O. Scull, of Baltimore, Md., has been elected President of the Erie & Central New York Ry., to succeed Mr. Stewart Browne, of New York, resigned.

Mr. Luther E. Gregory, Civil Engineer, United States Navy, has been detached from the New York Navy Yard and ordered to the navy yard at Portsmouth, N. H.

Mr. Ferdinand W. Peck, Commissioner-General to the Paris Exposition, whose appointment was reported in our issue of July 28, has announced the following appointments to his staff, with the statement that no further ones will be made until his return from Paris: Director of Affairs, Mr. Paul Blackmar; Director of Mining and Mineralogy, Mr. F. J. V. Skiff; Temporary Director of Press Bureau, Mr. Robert J. Thompson; Private Secretary, Mr. J. H. McGibbons, and Secretaire Francaise, Count de Valcourt Vermont. The headquarters of the commission are in the Auditorium Bldg., Chicago.

Mr. John A. Ockerson, M. Am. Soc. C. E., Principal Assistant Engineer to the Mississippi River Commission, with headquarters in St. Louis, Mo., has been appointed by President McKinley, as a member of the above commission, to succeed Mr. Henry Flad, M. Am. Soc. C. E., whose death was announced in our issue of June 23. The position which is for life carries with it a salary of $3,500 a year. Mr. Ockerson is a graduate of the University of Illinois, Urbana and Champlain, Ill., and has been engaged on engineering work on the Mississippi River for the past 22 years, of which 17 years have been spent on the commission's engineer corps. He is also a member of the St. Louis Engineers' Club and the National Geographical Society, and is the author of "The Mississippi River from St. Louis to the Sea," and a number of important papers relating to various phases of the Mississippi River improvement work.

## OBITUARY.

Mr. William Gardner, engineer for gas plants and manufacturer of fire clay materials for gas works, formerly of Pittsburg, Pa., died at his home in Colorado Springs, Colo., Aug. 5. He built the first gas works in Portland, Ore., and was one of the original members of the American Gaslight Association. In 1889, as Consulting Engineer, he reconstructed the gas works at Johnstown, Pa., and in 1893 erected the gas works in Altoona, Pa., which was his last important work.

## ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

AMERICAN MATHEMATICAL SOCIETY.
Aug. 19-20. Annual meeting, Boston, Mass. Secy., F. N. Cole, Columbus University, New York city.

AMERICAN CHEMICAL SOCIETY.
Aug. 22-23. Annual meeting, Boston, Mass. Secy., Albert C. Hale, 551 Putnam Ave., Brooklyn, N. Y.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.
Aug. 22-27. Annual meeting, Boston, Mass. Secy., F. W. Putnam, Salem, Mass.

GEOLOGICAL SOCIETY OF AMERICA.
Aug. 23. Annual meeting, Boston, Mass. Secy., H. L. Fairchilds, Rochester, N. Y.

AMERICAN FORESTRY ASSOCIATION.
Aug. 23-24. Annual meeting, Boston, Mass. Pres., Francis H. Appleton, 101 Tremont St., Boston, Mass.

NATIONAL IRRIGATION CONGRESS.
Sept. 1-3. Annual convention, Cheyenne, Wyo. Secy., J. C. Harpham.

TECHNICAL SOCIETY OF THE PACIFIC COAST.
Sept. 2. Secy., O. Von Geldern, 819 Market St., San Francisco, Cal.

GERMAN-AMERICAN TECHNICAL SOCIETY.
Sept. 3-7. Annual meeting, Philadelphia Section, Reading, Pa. Secy., A. Schumann, 532 North 4th St., Philadelphia, Pa.

ENGINEERS' SOCIETY OF WESTERN NEW YORK.
Sept. 5. Secy., H. J. March, Library Bldg., Buffalo, N. Y.

AMERICAN STREET RAILWAY ASSOCIATION.
Sept. 6-9. Annual convention, Boston, Mass. Secy., T. C. Pennington, 2020 State St., Chicago, Ill.

AMERICAN SOCIETY OF CIVIL ENGINEERS.
Sept. 7. Secy., C. W. Hunt, 220 W. 57th St., New York city.

CENTRAL RAILWAY CLUB.
Sept. 9. Secy., H. D. Vought, 114 5th Ave., New York city.

MONTANA SOCIETY OF ENGINEERS.
Sept. 10. Secy., A. S. Hovey, National Bank Bldg., Helena, Mont.

THE LOUISIANA ENGINEERING SOCIETY.
Sept. 12. Secy., J. F. Coleman, 712 Union St. New Orleans, La.

ASSOCIATION OF EDISON ILLUMINATING COMPANIES.
Sept. 12-13. Annual meeting, Sault Ste. Marie, Mich. Secy., Wilson S. Howell, Newark, N. J.

NORTHWEST RAILWAY CLUB.
Sept. 13. Secy., T. A. Foque, Soo Line, Minneapolis, Minn.

CIVIL ENGINEERS' CLUB OF CLEVELAND.
Sept. 13. Secy., Wm. H. Searles, Case Library Bldg., Cleveland, O.

ROADMASTERS' ASSOCIATION OF AMERICA.
Sept. 13. Annual meeting, Denver, Colo. Secy., J. B. Dickson, Sterling, Ill.

NEW YORK STATE STREET RAILWAY ASSOCIATION.
Sept. 13-14. Annual meeting, Brooklyn, N. Y. Secy., H. A. Robinson, New York city.

DENVER SOCIETY OF CIVIL ENGINEERS.
Sept. 13. Secy., W. B. Lawson, 36 Jacobson Bldg., Denver, Colo.

THE RAILWAY SIGNALING CLUB.
Sept. 13. Secy., Earl M. Seitz, C. & N. W. Ry., Chicago, Ill.

ROADMASTERS' ASSOCIATION OF AMERICA.
Sept. 13. Annual meeting, Denver, Colo. Secy., J. B. Dickson, Sterling, Ill.

ENGINEERS' CLUB OF CINCINNATI.
Sept. 15. Secy., J. F. Wilson, P. O. Box 333, Cincinnati, O.

BROOKLYN ENGINEERS' CLUB.
Sept. 15. Secy., A. J. Prevost, Jr., 191 Montague St., Brooklyn, N. Y.

NORTHWESTERN TRACK AND BRIDGE ASSOCIATION.
Sept. 16. D. W. Meeker, St. Paul, Minn.

ENGINEERS' CLUB OF MINNEAPOLIS.
Sept. 19. Secy., H. E. Smith, 1620 S. E. 4th St., Minneapolis, Minn.

ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA.
Sept. 20. Secy., R. A. Fessenden, 410 Penn Ave., Pittsburg, Pa.

BOSTON SOCIETY OF CIVIL ENGINEERS.
Sept. 21. Secy., S. E. Tinkham, City Hall, Boston, Mass.

WESTERN FOUNDRYMEN'S ASSOCIATION.
Sept. 21. Secy., B. M. Gardner, 1522 Monadnock Block, Chicago, Ill.

CENTRAL STATES WATER-WORKS ASSOCIATION.
Sept. 27-29. Annual meeting, Springfield, O. Secy., John Fisher, 11 Riley St., Hamilton, O.

AMERICAN SOCIETY OF MUNICIPAL IMPROVEMENT.
Oct. 12. Annual meeting, Washington, D. C. Secy., D. L. Fulton, Bureau of Highways and Sewers, Allegheny, Pa.

AMERICAN INSTITUTE OF MINING ENGINEERS.
Oct. 18. Annual meeting, Buffalo, N. Y. Secy., R. W. Raymond, P. O. Box 223, New York city.

PACIFIC COAST GAS ASSOCIATION.—The 6th annual convention of this association was held at San Francisco, Cal., on Aug. 19-20. The following officers were elected for the ensuing year: Pres., Chas. F. Adams, Portland, Ore.; Vice-Pres., J. Clements, Red Bluff, Cal.; Secy. and Treas., John A. Britton, Oakland, Cal.

THE INTERNATIONAL MINING CONGRESS.—At the recent meeting of this organization, held at Salt Lake City, Utah, July 6-9, the following resolutions were adopted:

We do unanimously petition the Congress of the United States to create a new department of mines and mining, whose purpose shall be to aid, develop and foster the mining industry of the United States by every influence within its reach.

That the president of this association is hereby directed to appoint such committees and take such action as shall bring this measure to the attention of every member of Congress, and to stand firm in its support, without compromise of any nature, until favorable action has been secured.

AMERICAN STREET RAILWAY ASSOCIATION.—The entertainment program of the meeting to be held in Boston, Sept. 6-9, includes a trip to Concord and Lexington on Tuesday afternoon, and a reception in the evening. Wednesday afternoon, excursion will be taken down the harbor, and there will be a clambake at Nantucket Beach. Thursday afternoon is scheduled for a trip to Plymouth; in the evening the usual banquet will be held; Friday evening will be given up to a trolley excursion to Norumbega Park. The indications are that the exhibition part will be particularly successful, and already 24,750 ft. has been assigned to leading street railway supply firms and manufacturers.

INTERNATIONAL ASSOCIATION FOR THE TESTING OF MATERIALS—American Section.—The first annual meeting of the American Section will be held Aug. 27 at the Engineers' Club, 1122 Girard St., Philadelphia, Pa. The program includes an afternoon session for general business and an evening session, at which the following subjects will be discussed:

"The relation of the International Association to producers and consumers," to be opened by Dr. Charles B. Dudley and Mr. William R. Webster: "In what manner will the adoption of standard specifications improve industrial methods and processes," to be opened by Prof. Rolla C. Carpenter and Mr. Gus C. Henning.

The officers of the American Section are: Chairman, Prof. Mansfield Merriman; Vice-Chairman, Prof. Henry M. Howe; Secy., Richard L. Humphrey; Treas., Paul Kreuzpointner; Members of the International Advisory Council, Dr. R. G. G. Moldenke and Prof. Henry M. Howe.

The Association's official organ is "Baumaterialienkude," and the subscription price to members is $2.50; others, $3.50; obtained from the secretary, Mr. Richard L. Humphrey, Testing Laboratory, City Hall, Philadelphia, Pa.

OHIO ELECTRIC LIGHT ASSOCIATION.—The 4th annual meeting of this association is scheduled to be held at Sandusky, O., Aug. 18-19. The following is the list of papers to be presented:

"Positive and Negative Economies in Small Central Stations," E. P. Roberts; "Some Suggestions Relative to Determining the Cost of Electrical Supply," M. E. Turner; "The Meter's Relation to the Dividend," Caryl D. Haskins; "Comparative Commercial Qualities of Old and Modern Transformers as Applied to an Exchange," J. H. Perkins; "Long-distance Transmission of Power," E. J. Berg.

In addition, the following topics will be discussed:

"What are the advantages and disadvantages of enclosed arc lamps for outside lighting?" "Can the candle power of arc lamps be accurately determined by the use of a portable photometer?" "In what way can competition of the gasoline incandescent burner be most successfully met?" "Is it advisable for a plant to change from 15,000 volts alternating single-phase to 7,200 two-phase if no question of motor business is concerned?" "What are the types and makes of engines in use in the smaller plants of the association; the time of their installation and their condition at the present time?"

ROADMASTERS' ASSOCIATION OF AMERICA.—The 16th annual meeting will be held at Denver, Colo., Sept. 13-15, at which committee reports on the following subjects will be presented:

1. Best method of preventing the creeping of rails.
2. Tie-plates; the results and benefits obtained from their use.
3. Track joints; results obtained from the use of various devices.
4. The advisability of increasing the length of rails, and the advantages to be derived from using miter cut ends for the rails.
5. At what degree of curvature should widening of the gage begin, and how much should the gage be widened for each degree?
6. Late improvements in frogs and switches.

There will also be a paper by Mr. H. W. Church on "Discipline in its Practical Application to Track Forces," and Mr. C. M. Hobbs, of the D. & R. G. R. R., will deliver an illustrated lecture on "Colorado versus Switzerland." The business proceedings will include the consideration of proposed amendments to the constitution.

The meetings will be held in the hall of the Chamber of Commerce, and the Railway and Track Supply Association will have its headquarters and exhibit near this building.

Several excursions have been arranged, and after the convention there will be a trip to Colorado Springs, Pike's Peak, Leadville and Glenwood Springs.

J. B. Dickson, Secy.

ASSOCIATION OF RAILWAY SUPERINTENDENTS OF BRIDGES AND BUILDINGS.—The 8th annual meeting of this association will be held Oct. 18-20, at Richmond, Va., as announced in our last issue. The list of subjects to be reported upon is given as follows:

Pile-rings and method of protecting pileheads in driving; Cost and manner of putting in pipe culverts; Best floors for shops and roundhouses; Roundhouse smokejacks and ventilation; Cattleguards and wingfences; Prevention of fire in railroad buildings; Storage of fuel, oil and other station supplies at way-stations; Railroad highway crossing gates; What repairs, and how can they be safely made, to metal and wooden spans without the use of falsework; Care of iron bridges after erection, including best method of protecting them from injury by salt water drippings from refrigerator cars; Turntable construction.

At a meeting of the executive committee held in Chicago on Feb. 21, the requirements for eligibility of an applicant were defined by a resolution which said in substance that the clause in the constitution referring to entrance requirements, "should, in accordance with the action of the association in the past, be construed on the basis that the applicant must be in the employ of a railroad company, either as a superior officer with general control over questions affecting the bridge and building department, or as a subordinate official having actual responsible charge of work connected with the construction or maintenance of railroad bridges or buildings, independent of the actual title, whether as superintendent, supervisor, engineer, general foreman, general inspector, master of road, master carpenter, etc., but not to include persons only in sub-charge of individual jobs or special classes of work, such as gang-foremen, inspectors, clerks, draftsmen, etc."

THE CIVIL ENGINEERS' CLUB OF CLEVELAND.—A regular meeting of this club was held Aug. 9, at which Mr. Lehman B. Holt read a paper on "Test Meters for Boiler Plants." After describing the requisites of a water meter, as attached to a service pipe to measure the total consumption, the importance of accuracy of record in meters used to measure boiler feed water was emphasized.

The old method of testing boilers by weighing the water cannot now be applied, owing to the expense of so doing. In every day service the fuel consumption is much greater than determined by a test. An accurate meter serves the purpose of a continuous test, and is as essential in determining the efficiency of boilers and the relative value of fuels as the steam indicator is in determining the power developed by the engine. By noting the readings in a log-book, the duty performed by the boilers is known. Incidentally the test meter also indicates the relative skill of different sets of firemen and tends to prevent waste on their part.

A Worthington meter was exhibited and described. It was stated that the error in modern meters has been proved to be only a small fraction of 1%, and as the rate of error was constant, it could be easily eliminated in the general result.

By request Mr. Holt then exhibited some blue prints of the Worthington steam acumulator, and described its construction and operation. As compared with a weight accumulator, this has several advantages. It requires no bulky weight, no heavy foundations, and produces no water hammer requiring extra strength in connections.

The water hammer of a weighted accumulator often amounts to 25%, and sometimes 50%, of the static pressure.

It is particularly adapted to the regulation of plants operated by water pressure, such as hydraulic presses and passenger elevators. A sudden demand in the service by reducing the water head causes additional steam to be supplied to the pumps, and also in certain cases to an auxiliary pump, by which means the loss of head is promptly restored. The whole action is automatic and requires no attention on the part of the engineer. In large plants, and especially where the service is very fluctuating, these machines have proved very advantageous and economical. The effect of the accumulator is somewhat analogous to that of a steam governor.

Wm. H. Searles, Secy.

## CONSTRUCTION NEWS.

### CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

| Bids to be opened. | Work. | Place. | See Eng. News. |
|---|---|---|---|
| Aug. 18. | Water supply, | Jersey City, N. J. | July 14 |
| Aug. 18. | Army supplies, | Memphis, Tenn. | July 28 |

Advertised, Eng. News, July 28 to Aug. 11.

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|---|---|---|---|
| Aug. 18. | Water-works, | Rome, N. Y. | Aug. 4 |
| Aug. 18. | Highway, | Truro, Mass. | Aug. 11 |
| Aug. 18. | Broken stone, etc., | New York. | Aug. 11 |
| Aug. 18. | Paving, curbing, etc., | Reading, Pa. | Aug. 18 |
| Aug. 18. | Macadam road, | Williamstown, Mass. | Aug. 18 |
| Aug. 18. | Macadam road, | Lunenburg, Mass. | Aug. 18 |
| Aug. 18. | Bonds, | Taunton, Mass. | Aug. 18 |
| Aug. 18. | Brick sewer, | Carnegie, Pa. | Aug. 18 |
| Aug. 18. | Bridge, | Park Falls, Wis. | Aug. 18 |
| Aug. 18. | Special castings, | Chicago, Ill. | Aug. 18 |
| Aug. 19. | Retaining wall, | Troy, N. Y. | Aug. 18 |
| Aug. 19. | Fire hose, | St. Louis, Mo. | Aug. 18 |
| Aug. 19. | Gravel roads, | Columbus, Ind. | Aug. 18 |
| Aug. 19. | Macadam paving, | Lima, O. | Aug. 18 |
| Aug. 19. | Macadam paving, | Paterson, N. J. | Aug. 18 |
| Aug. 19. | Granite paving, | Portland, Me. | Aug. 18 |
| Aug. 19. | Iron bridge, | Ontonagon, Mich. | Aug. 18 |
| Aug. 19. | Water department supplies, | Cincinnati, O. | Aug. 18 |
| Aug. 19. | Pipe sewers, | Pontiac, Mich. | Aug. 11 |

Advertised, Engineering News, Aug. 11.

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|---|---|---|---|
| Aug. 19. | Boilers (2), | National Home, Wis. | Aug. 11 |
| Aug. 19. | Steel bridge, | Delaware, O. | Aug. 11 |
| Aug. 19. | Gate house, | New Bedford, Mass. | Aug. 11 |
| Aug. 19. | Levee work, | Dayton, O. | Aug. 11 |
| Aug. 19. | Bridge bonds, | Jersey City, N. J. | Aug. 11 |
| Aug. 19. | Grading, etc., | Guilford, Conn. | Aug. 11 |
| Aug. 19. | Paving, etc., | Troy, N. Y. | Aug. 11 |
| Aug. 19. | Paving sidewalks, | Dayton, O. | Aug. 11 |
| Aug. 19. | Viaduct substructure, | Cleveland, O. | July 28 |
| Aug. 19. | Asphalt paving, | Cleveland, O. | July 28 |
| Aug. 20. | Bridge, | Cincinnati, O. | July 28 |
| Aug. 20. | Dredging, | Montgomery, Ala. | July 28 |

Advertised, Eng. News, July 28 to Aug. 11.

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|---|---|---|---|
| Aug. 20. | Paving bonds, | Mansfield, O. | July 28 |
| Aug. 20. | Electric lighting, | Whitesboro, N. Y. | July 14 |

Advertised, Eng. News, July 14 and 21.

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|---|---|---|---|
| Aug. 20. | Street bonds, | Malta, O. | July 21 |
| Aug. 20. | Pumping engines, | Lancaster, O. | Aug. 4 |
| Aug. 20. | High school building, | Sharonville, O. | Aug. 4 |
| Aug. 20. | Road bonds, | Houston, Tex. | Aug. 4 |
| Aug. 20. | Macadam paving, | Suffield, Conn. | Aug. 11 |
| Aug. 20. | Dam, abutments, etc., | Brantford, Ont. | Aug. 11 |
| Aug. 20. | Bonds, | Tiffin, O. | Aug. 11 |
| Aug. 20. | Bridge, | Brantford, Ont. | Aug. 11 |
| Aug. 20. | Iron bridge, | Cocalico, Pa. | Aug. 11 |
| Aug. 20. | Power pump, | Chambersburg, Pa. | Aug. 11 |

Advertised, Eng. News, Aug. 11 and 18.

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|---|---|---|---|
| Aug. 20. | Curbing, gutter, etc., | Piqua, O. | Aug. 11 |
| Aug. 20. | Concrete walks, | Toledo, O. | Aug. 11 |
| Aug. 20. | Electric light plant, | Eaton Rapids, Mich. | Aug. 18 |
| Aug. 20. | Grading, | Los Angeles, Cal. | Aug. 18 |
| Aug. 20. | Paving, | Quincy, Ill. | Aug. 18 |
| Aug. 20. | Bridge, | Tiffin, O. | Aug. 18 |
| Aug. 20. | Bridges (3), | Chehalis, Wash. | Aug. 18 |
| Aug. 20. | School building, | Glenshaw, Pa. | Aug. 18 |
| Aug. 20. | Church building, | Marietta, Ga. | Aug. 18 |
| Aug. 20. | Hotel reconstruction, | Niagara Falls, Ont. | Aug. 18 |
| Aug. 20. | Painting bridges, | St. John, N. B. | Aug. 18 |
| Aug. 20. | Bonds, | St. Paul, Minn. | Aug. 18 |
| Aug. 21. | Church building, | Winnebago City, Minn. | Aug. 11 |
| Aug. 22. | Masonic building, | Wichita, Kan. | Aug. 11 |
| Aug. 22. | Bridge, | La Moure, N. Dak. | Aug. 11 |
| Aug. 22. | Sewerage system, | Santa Ana, Cal. | Aug. 11 |
| Aug. 22. | Addition to engine house, | Washington, D. C. | Aug. 11 |
| Aug. 22. | Heating, etc., | Paterson, N. J. | Aug. 11 |
| Aug. 22. | Wells, | Washington, D. C. | Aug. 11 |

Advertised, Engineering News, Aug. 11.

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|---|---|---|---|
| Aug. 22. | Street cleaning, | Oakland, Cal. | Aug. 11 |
| Aug. 22. | Paving, etc., | South Bend, Ind. | Aug. 11 |
| Aug. 22. | Brick paving, etc., | Fremont, Neb. | Aug. 11 |
| Aug. 22. | Heating and ventilation, | Paterson, N. J. | Aug. 4 |

Advertised, Eng. News, Aug. 4 and 11.

| | | | |
|---|---|---|---|
| Aug. 22. | Bridge (400 ft.), | Hamilton, O. | Aug. 4 |
| Aug. 22. | High school building, | Columbus, O. | Aug. 4 |
| Aug. 22. | Court house, | Charleston, Ill. | Aug. 4 |
| Aug. 22. | School buildings, | Ione, Cal. | Aug. 4 |
| Aug. 22. | Electric light plant, | Mineral Point, O. | July 28 |

Advertised, Eng. News, July 28 to Aug. 11.

| | | | |
|---|---|---|---|
| Aug. 22. | Steel substructure, | Lebanon, O. | July 28 |
| Aug. 22. | Water-works, | Mineral Point, O. | July 28 |

Advertised, Eng. News, July 28 to Aug. 11.

| | | | |
|---|---|---|---|
| Aug. 22. | Macadam, curb, etc. | Lansingburg, N. Y. | Aug. 18 |
| Aug. 22. | Brick paving, etc., | Washington, Pa. | Aug. 18 |
| Aug. 22. | Removal of buildings, | Washington, Pa. | Aug. 18 |
| Aug. 22. | Heating apparatus, | Arnprior, Ont. | Aug. 18 |
| Aug. 22. | Pipe sewers, | Schenectady, N. Y. | Aug. 18 |
| Aug. 22. | Paving, etc., | New Kensington, Pa. | Aug. 18 |
| Aug. 22. | Sidewalks and paving, | Kansas City, Mo. | Aug. 18 |
| Aug. 22. | Paving and curb, | Des Moines, Ia. | Aug. 18 |
| Aug. 22. | Macadamizing, | Oakland, Cal. | Aug. 18 |
| Aug. 22. | Supplies, | New York, N. Y. | Aug. 18 |
| Aug. 22. | School building, | Boston, Mass. | Aug. 18 |
| Aug. 22. | School building, | Marion, O. | Aug. 18 |
| Aug. 22. | Library building, | Forest City, Ia. | Aug. 18 |
| Aug. 22. | Hospital building work, | Minneapolis, Minn. | Aug. 18 |
| Aug. 22. | Grain elevator, | Halifax, N. S. | Aug. 18 |
| Aug. 22. | Grading, etc., | Revere, Mass. | Aug. 18 |
| Aug. 22. | Pipe sewer, etc., | Wilkinsburg, Pa. | Aug. 18 |
| Aug. 22. | Storm sewer, | Council Bluffs, Ia. | Aug. 18 |
| Aug. 22. | Lateral sewer, | Kansas City, Mo. | Aug. 18 |
| Aug. 22. | Reservoir, | Devon, Pa. | Aug. 18 |

Advertised, Engineering News, Aug. 18.

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|---|---|---|---|
| Aug. 22. | Water mains, | Bay City, Mich. | Aug. 18 |
| Aug. 22. | Pipe sewers, | New Kensington, Pa. | Aug. 18 |
| Aug. 23. | Repairing steamer, | Washington, D. C. | Aug. 18 |
| Aug. 23. | Wrought iron work, | New York. | Aug. 18 |
| Aug. 23. | Passenger elevators (2) | New York, N. Y. | Aug. 18 |
| Aug. 23. | Sewer and bonds, | Crafton, Pa. | Aug. 18 |
| Aug. 23. | Brick paving, | Warren, O. | Aug. 18 |
| Aug. 23. | Brick paving, | Philadelphia, Pa. | Aug. 18 |
| Aug. 23. | Sewage tanks, | Kewanee, Ill. | Aug. 18 |
| Aug. 23. | Laying water pipe, | Harrisburg, Pa. | Aug. 18 |
| Aug. 23. | Pipe sewers, etc., | Kearney, N. J. | Aug. 18 |
| Aug. 23. | Public building, | Ingersoll, Ont. | Aug. 18 |
| Aug. 23. | School building, | Columbus, O. | July 28 |
| Aug. 23. | Water pipe, | Coolgardie, West Australia. | June 2 |
| Aug. 23. | Electric light plant, | Bunker Hill, Ill. | Aug. 4 |
| Aug. 23. | Collegiate building, | Iowa City, Ia. | Aug. 11 |
| Aug. 23. | Steel projectiles, | Washington, D. C. | Aug. 11 |
| Aug. 23. | Wharf, | Fort Morgan, Ala. | Aug. 11 |
| Aug. 23. | Naval supplies, | Philadelphia, Pa. | Aug. 11 |
| Aug. 23. | School building, | Roanoke, Va. | Aug. 11 |
| Aug. 23. | Water-works, | Greenville, Cal. | Aug. 11 |
| Aug. 23. | Macadam road, | Naugatuck, Conn. | Aug. 11 |

Advertised, Engineering News, Aug. 11.

| | | | |
|---|---|---|---|
| Aug. 24. | Water-works improvements, | Elyria, O. | Aug. 4 |
| Aug. 24. | Sidewalks, | Cambridge City, Ind. | Aug. 4 |
| Aug. 24. | Hire dredging plant, | Mobile, Ala. | July 28 |

Advertised, Eng. News, July 28 to Aug. 18.

| | | | |
|---|---|---|---|
| Aug. 24. | Water meters, | Jersey City, N. J. | Aug. 18 |
| Aug. 24. | Sewers, | Jersey City, N. J. | Aug. 18 |
| Aug. 24. | Cylinder plates, | Tompkinsville, S. I. | Aug. 18 |

Advertised, Engineering News, Aug. 18.

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|---|---|---|---|
| Aug. 24. | Slag roadways, | Chicago, Ill. | Aug. 18 |
| Aug. 24. | Macadamizing, | Kansas City, Mo. | Aug. 18 |
| Aug. 24. | Gun forgings, | Washington, D. C. | Aug. 18 |
| Aug. 24. | Extend'g elect. plant, | Nat'l Military Home. | Aug. 18 |
| Aug. 24. | Hospital building alterations, | New York. | Aug. 18 |
| Aug. 24. | Steam heating plant, | St. Peter, Minn. | Aug. 18 |
| Aug. 24. | Repairing roadway, | Mount City, Ill. | Aug. 18 |
| Aug. 24. | Brick paving, | Carbondale, Pa. | Aug. 18 |

Advertised, Engineering News, Aug. 18.

| | | | |
|---|---|---|---|
| Aug. 24. | Macadam, curb, etc., | Jersey City, N. J. | Aug. 18 |
| Aug. 24. | Repairing sewer, | New York, N. Y. | Aug. 18 |
| Aug. 25. | Sheet asphalt, | Newark, N. J. | Aug. 18 |
| Aug. 25. | Bonds, | New Orleans, La. | Aug. 18 |
| Aug. 25. | Coal house, | Danville, Ill. | Aug. 18 |
| Aug. 25. | Business building, | Crookston, Minn. | Aug. 18 |
| Aug. 25. | Pipe sewers, | Hudson, N. Y. | Aug. 18 |
| Aug. 25. | Storage dam, | McDonald, Pa. | Aug. 18 |

Advertised, Engineering News, Aug. 18.

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| Aug. 25. | Sewer, | Cincinnati, O. | Aug. 18 |
| Aug. 25. | Ventilating plant, | Buffalo, N. Y. | Aug. 18 |
| Aug. 25. | City hall, | Warren, O. | Aug. 18 |
| Aug. 25. | Lighthouse, | Baltimore, Md. | July 28 |

Advertised, Engineering News, July 28.

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|---|---|---|---|
| Aug. 25. | Bonds ($80,000), | Healdsburg, Cal. | Aug. 4 |
| Aug. 25. | School building, | Waldo, O. | Aug. 4 |
| Aug. 25. | School building, | Passaic, N. J. | Aug. 11 |
| Aug. 25. | Filling sewage beds, | Plainfield, N. J. | Aug. 11 |
| Aug. 25. | Bridge work, | London, O. | Aug. 11 |
| Aug. 25. | Sewers, | Cleveland, O. | Aug. 11 |
| Aug. 25. | Electric light plant, | McArthur, O. | Aug. 11 |
| Aug. 25. | Sewer, New Hampton, | Ia. | Aug. 11 |
| Aug. 26. | Barracks, National Soldiers' Home, | Va. | Aug. 11 |
| Aug. 26. | Water-works, | Healdsburg, Cal. | Aug. 11 |

Advertised, Engineering News, Aug. 11.

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| Aug. 26. | Water and light bonds, | Healdsburg, Cal. | Aug. 11 |

Advertised, Engineering News, Aug. 11.

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|---|---|---|---|
| Aug. 26. | Electric light plant, etc., | Healdsburg, Cal. | Aug. 11 |

Advertised, Engineering News, Aug. 11.

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|---|---|---|---|
| Aug. 26. | Pump engines (2), | Minneapolis, Minn. | July 21 |

Advertised, Eng. News, July 21 to Aug. 11.

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|---|---|---|---|
| Aug. 26. | Buildings, | Buffalo, N. Y. | Aug. 18 |
| Aug. 26. | School buildings, | Chicago, Ill. | Aug. 18 |
| Aug. 26. | Unloading scows, | New York, N. Y. | Aug. 18 |
| Aug. 27. | Grading, | Washington, D. C. | Aug. 18 |

Advertised, Engineering News, Aug. 18.

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|---|---|---|---|
| Aug. 27. | School building, | Chemawa, Ore. | Aug. 18 |
| Aug. 27. | Extending power dam, | Rock Island, Ill. | Aug. 18 |
| Aug. 27. | Water pipe, | Lakewood, O. | Aug. 4 |
| Aug. 27. | Road work, | Pittsburg, Pa. | Aug. 11 |
| Aug. 29. | Brick paving, | Malta, O. | Aug. 4 |
| Aug. 29. | Brick paving, | Canton, O. | Aug. 4 |
| Aug. 29. | Paving, etc., | Toledo, O. | Aug. 4 |
| Aug. 29. | Pumping eng. (3,000,000 galls.), | Marietta, O. | July 28 |
| Aug. 29. | Macadam paving, | Cincinnati, O. | Aug. 18 |
| Aug. 29. | Macadam paving, etc., | Marshall, Mo. | Aug. 18 |
| Aug. 29. | High school building, | Wilmington, Del. | Aug. 18 |
| Aug. 29. | Sewers, | Toledo, O. | Aug. 18 |
| Aug. 30. | Brick paving, etc., | Mattoon, Ill. | Aug. 18 |
| Aug. 30. | Iron bridge, | Arnprior, Ont. | Aug. 18 |
| Aug. 30. | Brewing plant, | Eaton, Pa. | Aug. 18 |
| Aug. 30. | Traveling cranes, | Chicago, Ill. | Aug. 18 |

Advertised, Eng. News, Aug. 18 and 25.

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|---|---|---|---|
| Aug. 30. | Grading, etc., for water-wks, | Cincinnati, O. | Aug. 4 |
| Aug. 30. | Dams, etc., | Mississippi River, Ill. | Aug. 4 |

Advertised, Eng. News, Aug. 4 to 25.

| | | | |
|---|---|---|---|
| Aug. 30. | Gravel roads, | Indianapolis, Ind. | Aug. 4 |
| Aug. 30. | Gas mains, etc., | San Jose, Cal. | Aug. 11 |
| Aug. 30. | Pipe sewers, | Peru, Ind. | Aug. 11 |
| Aug. 30. | School building, | Delphos, O. | Aug. 11 |
| Aug. 30. | Street bonds, | Orrville, O. | Aug. 11 |
| Aug. 31. | Hospital, | Fort Slocum, N. Y. | Aug. 11 |
| Aug. 31. | Coal handling plant, | New London, Conn. | Aug. 11 |
| Aug. 31. | Chapel building, | Lebanon, Pa. | Aug. 11 |
| Aug. 31. | Dredging, | Bridgeport, Conn. | Aug. 4 |

Advertised, Eng. News, Aug. 4 to 25.

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|---|---|---|---|
| Aug. 31. | Custom house, | Guayquil, Ecuador. | Apr. 21 |
| Aug. 31. | Lavatory building, etc., | Buffalo, N. Y. | Aug. 18 |
| Aug. 31. | Paving, etc., | Cleveland, O. | Aug. 18 |
| Aug. 31. | Grading, | Omaha, Neb. | Aug. 18 |
| Sept. 1. | Electric plant, | Abilene, Kan. | Aug. 18 |
| Sept. 1. | Water pump, | Gloucester City, N. J. | Aug. 18 |

Advertised, Eng. News, Aug. 18 and 25.

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|---|---|---|---|
| Sept. 1. | Filter plant, etc., | Louisville, Ky. | Aug. 18 |
| Sept. 1. | Water pipe, | Lanesboro, Minn. | Aug. 18 |
| Sept. 1. | Electric light plant, | Mystic, Conn. | Aug. 18 |
| Sept. 1. | Heating, ventilating, etc., | Lexington, Ky. | Aug. 18 |

Advertised, Eng. News, Aug. 18 and 25.

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|---|---|---|---|
| Sept. 1. | Sewerage system, | Clinton, Mass. | Aug. 18 |

Advertised, Engineering News, Aug. 18.

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|---|---|---|---|
| Sept. 1. | Drainage system, | Savannah, Ga. | June 30 |

Advertised, Eng. News, June 23 to Aug. 25.

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|---|---|---|---|
| Sept. 1. | Electric light plant, | Cullman, Ala. | July 21 |
| Sept. 1. | Water-works, | Norwood, N. Y. | July 21 |
| Sept. 1. | Bridges, | Johnsonburg, Pa. | Aug. 4 |

Advertised, Eng. News, Aug. 4 and 11.

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|---|---|---|---|
| Sept. 1. | Water-works, | Mobile, Ala. | Aug. 4 |

Advertised, Eng. News, Aug. 4 to 25.

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|---|---|---|---|
| Sept. 1. | Electric lighting, | Paris, Tex. | Aug. 11 |

Advertised, Eng. News, Aug. 11 to 25.

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|---|---|---|---|
| Sept. 1. | Dam, power house, etc., | Jackson, Mich. | Aug. 11 |

Advertised, Engineering News, Aug. 11.

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|---|---|---|---|
| Sept. 3. | Jail, Goliad, | Tex. | Aug. 18 |
| Sept. 3. | Hospital building, | Ukiah, Cal. | Aug. 18 |
| Sept. 3. | Sewage pumping plant, | No. Somerville, Mass. | Aug. 11 |

Advertised, Eng. News, Aug. 11 and 18.

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|---|---|---|---|
| Sept. 3. | Smokeless powder, | Washington, D. C. | Aug. 11 |
| Sept. 3. | Sewage pumping station, | Boston, Mass. | July 7 |

Advertised, Eng. News, July 7 and 14.

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|---|---|---|---|
| Sept. 5. | Dredging, | Waukegan, Ill. | Aug. 4 |

Advertised, Eng. News, Aug. 4 and 11.

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|---|---|---|---|
| Sept. 5. | Bridge, | Dillon, Mont. | Aug. 4 |
| Sept. 5. | Steel hull tugboat, | Seattle, Wash. | Aug. 11 |
| Sept. 5. | Construction materials, | Ft. Delaware, Del. | Aug. 11 |

Advertised, Eng. News, Aug. 11 to Sept. 1.

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|---|---|---|---|
| Sept. 5. | Macadam road | St. Paul, Minn. | Aug. 18 |
| Sept. 5. | Brick paving, | Fremont, O. | Aug. 18 |
| Sept. 5. | Brick paving, | Glens Falls, N. Y. | Aug. 18 |

Advertised, Eng. News, Aug. 18 and 25.

| | | | |
|---|---|---|---|
| Sept. 5. | Macadam road, | St. Paul, Minn. | Aug. 18 |
| Sept. 5. | Dynamo and engines, | Dunning, Ill. | Aug. 18 |
| Sept. 5. | Plans for market house, | San Antonio, Tex. | Aug. 18 |
| Sept. 6. | Improving road, | Carthage, O. | Aug. 18 |
| Sept. 6. | Street bonds, | Hasbrouck Heights, N. J. | Aug. 18 |
| Sept. 6. | Bridge, | Chateau, Mont. | Aug. 18 |
| Sept. 6. | Bridge, | San Jose, Cal. | Aug. 18 |
| Sept. 6. | Sewerage system, | Billings, Mont. | Aug. 18 |
| Sept. 6. | Pumping station, etc., | Winnipeg, Man. | Aug. 11 |

Advertised, Eng. News, Aug. 11 to 25.

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|---|---|---|---|
| Sept. 6. | Wells, | Winnipeg, Man. | Aug. 11 |

Advertised, Eng. News, Aug. 11 to 25.

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|---|---|---|---|
| Sept. 7. | Bridge, | Oroville, Cal. | Aug. 4 |
| Sept. 7. | Bridges (2), | Pendleton, Ore. | Aug. 18 |
| Sept. 7. | Brick paving, | Cleveland, O. | Aug. 18 |
| Sept. 7. | Heating and ventilation, | So. Omaha, Neb. | Aug. 18 |

Advertised, Eng. News, Aug. 18 and 25.

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|---|---|---|---|
| Sept. 8. | Macadam paving, | Shoals, Ind. | Aug. 18 |
| Sept. 8. | Bridge, | Roseburg, Ore. | Aug. 4 |
| Sept. 8. | Dykes, | Hudson River, N. Y. | Aug. 11 |

Advertised, Eng. News, Aug. 11 to Sept. 1.

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| Sept. 9. | Rubber suctions, | Charleston, S. C. | Aug. 11 |

Advertised, Eng. News, Aug. 11 to Sept. 1.

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|---|---|---|---|
| Sept. 9. | Sewer walls, | Baltimore, Md. | Aug. 18 |

Advertised, Eng. News, Aug. 18 to Sept. 8.

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|---|---|---|---|
| Sept. 10. | Improving road, | Mansfield, O. | Aug. 18 |
| Sept. 12. | Paving, etc., | Toledo, O. | Aug. 18 |
| Sept. 12. | Water and sewer bonds, | Mobile, Ala. | Aug. 11 |
| Sept. 12. | Grading, paving, etc., | Toledo, O. | Aug. 11 |
| Sept. 13. | Capitol building, | Helena, Mont. | July 28 |
| Sept. 13. | Brick sewer, etc., | Kearney, N. J. | Aug. 18 |

Advertised, Eng. News, Aug. 18 to Sept. 8.

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|---|---|---|---|
| Sept. 13. | Repairing bridge, | Mountain Home, Idaho. | Aug. 18 |
| Sept. 14. | Hospital building, | Los Angeles, Cal. | Aug. 18 |
| Sept. 15. | Enlarging court house, | Lisbon, N. Dak. | July 28 |
| Sept. 15. | Fire alarm system, | Mobile, Ala. | Aug. 11 |

Advertised, Eng. News, Aug. 11 to Sept. 1.

| | | | |
|---|---|---|---|
| Sept. 19. | Hospital plans, | San Francisco, Cal. | Aug. 4 |
| Sept. 19. | Jail, | Lovelocks, Nev. | Aug. 18 |
| Sept. 19. | Bridge bonds, | Los Angeles, Cal. | Aug. 18 |
| Sept. 20. | Court house, | Marietta, Ga. | Aug. 18 |
| Oct. 1. | Arc lighting, | Marshfield, Wis. | Aug. 18 |
| Oct. 1. | Monitors (4), | Washington, D. C. | July 7 |
| Oct. 1. | School building (equipment), | St. Thomas, Ont. | July 7 |
| Oct. 5. | Bridge superstructure, | Chicago, Ill. | Aug. 11 |
| Oct. 24. | Markets, etc., | Belem, Brazil | Apr. 28 |
| Oct. 30. | School building, | Chehalis, Wash. | June 16 |
| Dec. 31. | Plans for station, etc., | Stockholm, Sweden. | June 23 1899. |
| Jan. 1. | City hall plans, | Bridgeport, Conn. | Aug. 18 |

## RAILWAYS.

ASHLAND & WOOSTER.—J. L. Eberhardt, Ch. Engr., Wooster, O., informs us that the surveys are completed, and the right of way obtained for the whole line, except from Apple Creek to Wooster and Austin, a distance of 12 miles. The total length of the completed line will be 50 miles, running from Ashland to Beach City, via Jeromeville, Austin, Millbrook, Wooster, Apple Creek and West Lebanon, O. The capital for construction has been secured. Contracts will not be let, but the company will do its own work. Grading is completed from Apple Creek east to West Lebanon, and steel laid for six miles, and the line is in operation for light traffic from Jeromeville to Austin and the junction with the Findlay, Fort Wayne & Western Ry. Pres., H. B. Camp, Akron, O.

BOOMER COAL & COKE.—Clifton Buxton, Ch. Engr., Ohio Central R. R., Toledo, O., informs us that if an extension is built to this company's new mines up Boomer's Branch, that it will simply be a siding about one mile in length.

DENVER & RIO GRANDE.—Orman & Crook, Contractors, Pueblo, Colo., inform us that they are now employing 400 men on the extension of this line from Leadville to the Ibex mining district, known as the Crysolite extension, 10 miles in length; and that it is expected to complete the work by Oct. 1.

GRAND MARAIS & NORTH SHORE.—Press reports state that R. W. Nichols, Surveyor of St. Louis county, Duluth, Minn., is making the surveys for this proposed line between Duluth and Port Arthur, Ont., via Grand Marais, Minn., a distance of 185 miles.

GULF, BEAUMONT & GREAT NORTHERN.—The charter of this company was filed and approved in Texas, Aug. 5; the capital stock to be $250,000, and the principal office at Beaumont, Tex. It is proposed to construct and operate a standard gage railway commencing at a point on the Gulf of Mexico, about one mile south of Sabine Pass, Tex., and run northwardly through the counties of Jefferson, Orange, Hardin, Tyler, Jasper, Newton, Sabine, St. Augustine, Angelina, Nacogdoches, Shelby, Panola, Rusk, Gregg, Harrison, Marion, Upshur, Camp, Cass, Morris, Titus, Franklin, Hopkins, Delta, Red River and Lamar to the city of Paris, a distance of about 350 miles. The incorporators are, Wm. A. Fletcher, Wm. Weiss, Wilbur S. Davidson, F. A. Holbig, Frank M. Aldridge, Wm. M. Wilson, Willard C. Averill, George C. Greer, Geo. R. Wansbrough, Mark Weiss, S. H. Van Warner, of Jefferson county; John H. Kirby, of Harris; W. T. Atkins and Sam A. McNeeley, of Marion.

HALIBURTON, WHITNEY & MATTAWA.—It is announced that an application will be made in October for the incorporation of this company, which proposes to construct a railway from Mattawa, Ont., to the Ottawa, Arnprior & Parry Sound Ry., at Whitney, and thence to Haliburton. Solicitors, Gordon & Sampson, Toronto, Ont.

HAYTI.—It is announced that the construction of the projected railway in Hayti within the next two months is assured. The government has granted to Cincinnatus Leconte, Minister of the Interior and Public Works, and Blanc Busebe, the exclusive privilege of constructing the line, the concession to last for 60 years. The railway will be narrow gage, running from Cape Haytien to La Grande Riviere du Nord, a distance of about 18 miles to the northeast. It is said that contracts for supplying the material have not yet been let, and that it is to be bought wholly in the United States. Engr., H. Thomasseh.

MERCHANTS & MANUFACTURERS.—It is now proposed by some to make this projected railway in Detroit, Mich., an elevated system. The scheme as originally outlined was to construct a tunnel underneath Fort St. and Cadillac Square, between the Fort St. Union station and the Brush St. station, and at the same time to build a surface line between the two points along the streets near the river. Lewis Warfield, Ch. Engr., 54 Wall St., New York.

MEXICO.—Press reports state that J. P. Riverall, Gen. Mgr., Hidalgo Express Co., Mexico City, Mexico, has been granted a concession to construct a railway from Palo Herrado to San Andres, Tuxtla and side branches. The plans have been approved, and it is proposed to begin work at once. Purchases of the various kinds required will, it is said, be made in the United States, and F. E. Lee will superintend the construction of the line.

MISSOURI, KANSAS & TEXAS.—Press reports state that this company has contracted with Jones & Laughlins and the Pittsburg Locomotive & Car Works for locomotives, machinery, structural iron for bridges, steel rails, etc., valued at about $500,000. S. B. Fisher, Ch. Engr., St. Louis, Mo.

ONTARIO & RAINY RIVER.—Surveys are said to have commenced for this proposed railway from the western terminus of the Port Arthur, Duluth & Western Ry. along the north side of the boundary line. The Canadian government having granted a subsidy to the company, the construction of the line from Gunflint to Fort Frances will soon be constructed.

OREGON & MISSOURI.—Reports state that this company is about to be organized, with a capital stock of $100,000, to construct a railway from a point on the Kansas City, St. Joseph & Council Bluffs R. R. at Forest City, or Curzon Switch, to Oregon, and eventually to Fillmore, Mo., 17 miles. Irving H. Wheatcroft, Vice-Pres and Gen. Mgr. Colorado Valley Ry., Sweetwater, Tex., is said to be interested.

PHILADELPHIA & READING.—Reports state that this company will soon begin the construction of a new line at Shippensburg, Pa., on the Philadelphia, Harrisburg & Pittsburg R. R., to a connection with the Western Maryland R. R., a distance of about 1½ miles, thus doing away with the large and heavy grade the company now has to contend with to reach the Western Maryland tracks. The surveys for the new extension have been made, and bids have been asked for the construction of the road. It is also said to be the intention of the Reading and the Western Maryland Railway companies to build a large freight yard. H. K. Nichols, Ch. Engr., Philadelphia, Pa.——E. D. Smith & Co., contractors, of Philadelphia, have completed the work of filling in the trestle on this line at Yardley, Pa., which was 55 ft. high, and required the dumping of 37,764 carloads of earth.

RARITAN TERMINAL & TRANSPORTATION.—This company was incorporated in New Jersey Aug. 4, with a capital stock of $50,000, with $2,000 paid in. It is proposed to construct and operate a railway in Perth Amboy, N. J. The incorporators are, Adolph Lewisohn and Jesse Lewisohn, New York; Jas. C. McCoy and W. E. Tobey, Perth Amboy; Joseph Rechert, Hoboken, N. J.; Sidney Riddlestorffer, Upper Montclair, N. J.; Edgar Buffum, Newark, N. J. Principal office, 258 Smith St., Perth Amboy, N. J.

ROCHESTER & SODUS BAY.—This company was incorporated in New York, Aug. 15, with a capital stock of $1,000,000, to build and operate a 45-mile railway from the United States government pier at Sodus Point to Rochester, N. Y. The directors are, Walter B. Duffy, Thomas J. Nicoll, John C. Woodbury, Daniel B. Pratt, George Wilder, Nathaniel Foote, A. Masters McDonald, Joseph C. Tone, Ira M. Laddington, George Wilson, Charles Van Voorhis, of Rochester; John A. Sullivan, of New York. The stock is taken principally by Wayne and Monroe county residents.

TITUSVILLE, CAMBRIDGE & LAKE ERIE.—A. H. Steele, Pres., 43 Cedar St., New York, informs us that no contracts have yet been awarded for the construction of a 30-mile extension of this railway, as stated in our last issue. Estimates, however, are now being made for the extension referred to.

UNION, CORNUCOPIA & EASTERN.—Bids are being received for the construction of this proposed railway from Union, Ore., to the Seven Devils mines, Idaho, 122 miles, including the building of a number of bridges, etc. The line, which will be standard gage, will be laid with 70-lb. rails, and five Howe truss bridges will have to be built. Grading has already been commenced on the Union, Cove & Valley Branch line between Union and Cove, a distance of 12 miles. Materials and equipment are now being purchased for this branch, which is expected to be in operation by Jan. 1. G. E. Howe, Ch. Engr.; Joseph Johnson, Supt. of Construction, both of Union, Ore.

## STREET AND ELECTRIC RAILWAYS.

NASHUA, N. H.—The Nashua St. Ry. Co. was granted a franchise Aug. 9 to extend its lines from the present terminal on Main St. to the Massachusetts state line at Tyngsboro, the gage of said track to be 56½ ins., and the motive power electricity. Pres., John A. Fisher; Gen. Mgr., P. F. Sullivan.

PORTSMOUTH, N. H.—W. H. Moore, of Portsmouth, informs us that the bids are all in for the construction of the Portsmouth & Dover R. R., from Portsmouth through Newcastle and Rye, six miles, but that the contract has not yet ben awarded. Pres., Frank Jones, Portsmouth, N. H.

DEDHAM, MASS.—The selectmen of Dedham have granted a franchise to the Norfolk Western St. Ry. Co. to place its tracks on High St. in this town, and the road must be completed by Nov. 1 or $5,000 be forfeited to the town. This line is projected to run from Medfield to Dedham, via Wellesley, Needham and Watertown, thus connecting the outlying towns of Norfolk county with the county seat in Dedham.

MILFORD, MASS.—A petition has been filed with the selectmen by Charles W. Shippee for the construction of an electric street railway connecting Milford with Hopkinton. The line asked for begins on Cedar St., Hopkinton town line, thence through Cedar to Dilla, Purchase, Pearl, Main and Franklin Sts. The petition is signed by Joseph G. Ray, Edgar K. Ray, Geo. W. Wiggin, W. S. Reed, Edward H. Rathburn, Orestus T. Doe. A hearing on the petition will be given on Sept. 1. It is the intention of the company to extend the railway from Hopkinton to Westboro via Woodville, and later to build to Woonsocket and Attleboro, thus making a continuous line of about 40 miles length. A location has already been asked for in Bellingham, and it is probable that an arrangement will be made with the Milford, Holliston & Framingham St. Ry. Co. whereby the latter's line will be used from Caryville to Milford.

EAST WINDSOR, CONN.—The East Windsor R. R. Co. has obtained a charter from the state legislature to build an electric line from the terminus of the Hartford St. Ry. at East Windsor to a connection with the Enfield, Long Meadow and Springfield line at Warehouse Point. S. D. Rockwell, of Warehouse Point, Conn., is one of the directors; Pres., Charles Woodward.

BROOKLYN, N. Y.—It is reported that the 5th Ave. and Lexington Ave. lines of the Brooklyn Elevated R. R. Co. will have their motive power changed to the Sprague electric system at an estimated cost of $800,000.

FALLSBURG, N. Y.—We are informed that Wheeler & Boody, Bowling Green Bldg., New York, have recently been awarded the contract for the construction of about 23 miles of electric railway for the Fallsburg & Monticello R. R. Co. Pres., B. Van Steenbergh, 53 Broadway, New York.

NEW HARTFORD, N. Y.—The citizens of New Hartford, Clayaville and Paris have declared their sentiment at public hearings to be in favor of the proposition to grant franchises to the Sauquoit Valley Electric St. R. R. Co. for the construction of a line through these places. Pres., A. P. Seaton.

NEW YORK, N. Y.—The state railroad commission, Aug. 11, approved the application of the Metropolitan St. Ry. Co., of New York, for permission to increase its capital stock from $30,000,000 to $45,000,000. It was also announced to-day that the board had granted 18 applications of the company for leave to change its motive power on its various lines, which, with the permits granted last week to the lines of the Third Ave. R. R. Co., embraces the fulfilment of the projected new system of surface railways in the Borough of Manhattan.

SCHENECTADY, N. Y.—Press reports state that the General Electric Co. has purchased the plants of the Schenectady St. Car Co. and the Schenectady Illuminating Co., and will hereafter operate both plants with its own power, soon to be obtained from the Hudson River at Mechanicsville. The street car lines will probably be greatly improved and extended.

SOLVAY, N. Y.—The village trustees have granted a franchise to the Syracuse, Skaneateles & Moravia R. R. Co. to construct and operate a double track electric railway through this village. Pres., Wing T. Parker, Moravia, N. Y.

ELIZABETH, N. J.—The Union county board of freeholders, Aug. 16, awarded the franchise for the construction of an electric railway between Elizabeth and Plainfield, 12 miles, to John Kean, representing the Elizabeth City Horse R. R. Co. As stated in our last issue, the company's bid was $250,000. The proposed railway will be built parallel to the Central R. R. of New Jersey on a new boulevard to be made by widening the present road from 66 ft. to 100 ft. The money paid for the franchise is expected to be used in building the boulevard. Plans and estimates for the work have been prepared by F. J. Hubbard, of Plainfield, and J. L. Bauer, Elizabeth.

WEEHAWKEN, N. J.—It is reported that the New Jersey Elevating & Transfer Co. has begun the construction of a new inclined railway from 19th St. in Weehawken to Weehawken St. and Mountain Road in West Hoboken, to be used by vehicles and pedestrians. The contract, it is stated, has not yet been let for the structural steel, nor is it definitely decided whether the motive power will be steam or electricity. The grade will be 72 ft. in 100 ft. Thos. H. McCann, Supt. of Construction, Hoboken, N. J.

BALTIMORE, MD.—It is reported that the David E. Evans Co. has been awarded the contract for the extension of the Baltimore Consolidated Ry., running south on Bond St., from Pratt to Gough St.

RICHMOND, KY.—Reports state that the Richmond, Nicholasville, Irvine & Beattyville R. R. will be put up for sale for the second time on Sept. 6, through the failure of Adolph Segal, of Philadelphia, to make his purchase good by July 23. The upset price will again be $160,000. Receiver, John McLeod.

EATON, O.—Chas. S. Parkhurst, P. O. Box 575, Anderson, Ind., informs us that the survey has been completed and the right of way is now being obtained for the proposed electric railway which the Western Ohio Traction Co. contemplates building from Eaton to Gratis, and thence to Jacksonboro and Middletown, O., a distance of 22 miles. As soon as the right of way is obtained it is expected to issue bonds for construction purposes. The Patton electric motor system will be used. The promotors of the line are Mr. Parkhurst and Walter W. Brandon, of Anderson.

SANDUSKY, O.—Chas. H. Stewart, Secy. Sandusky & Interurban Ry. Co., Cleveland, O., informs us that the right of way has been obtained and the capital secured for this proposed line from Sandusky to Lorain, via Huron and Vermillion, but that contracts for construction work will not be let until next year. Pres., H. A. Everett, Cleveland, O.; Ch. Engr., Thomas Wood, Sandusky.

DUNKIRK, IND.—The Dunkirk & Redkey Traction Co. was incorporated Aug. 12, with a capital stock of $75,000, to construct a line from Dunkirk to Redkey, Jay county. The incorporators are, H. C. Billingsley, Charles A. Hasbrouck, Elmer Bishop and W. H. Kewser.

DETROIT, MICH.—The Detroit, Utica & Rome Ry. Co. has been organized with capital stock of $300,000, to build an electric railway connecting the towns mentioned, a distance of 34 miles. It is hoped to have the line in full operation by January. The directors are, Alexander McVittie, Frank E. Kirby, Frank D. Andrus and Elliott G. Stevenson, of Detroit; Geo. B. Davis, of Utica, and Marvil I. Brabb, of Romeo.

ESCANABA, MICH.—The Escanaba Electric Ry. Co. has been reorganized and officers elected as follows: Pres. and Mgr., A. R. Moore; Vice-Pres., O. B. Fuller; Secy., I. C. Jennings; Treas., Edward Erickson. It is said that the line will be put into good condition, and inside of 90 days connection will be made at Wells with the Soo line. Aditional cars will be purchased and sheds built. Parks and resorts will be made along the Escanaba River, and it is expected that the road will later on be extended to Gladstone.

NORTHVILLE, MICH.—The township board at this place, Aug. 10, granted a franchise to the Detroit, Plymouth & Northville Electric R. R. Co. to construct its line through Northville.

SAGINAW, MICH.—It is reported that the receivers of the street railway have been authorized to issue $33,000 worth of additional certificates to be used in paying city taxes and building the track on South Michigan Ave.

EAST ST. LOUIS, ILL.—William Ortgier, of East St. Louis, one of the incorporators of the East St. Louis & Collinsville Electric Ry. Co., informs us that his company has sold the right of way which it owned to the Mississippi Valley Electric Ry. Co., of St. Louis, Mo., and of which J. H. Mehling is the president. The new company, it is said, will proceed at once to build two lines, one from East St. Louis to Edwardsville, via Collinsville and Glen Carbon, and the other from East St. Louis to Edwardsville via Brooklyn, Venice, Madison, Granite City and Alton.

QUINCY, ILL.—Press reports state that the entire electric street railway system was sold Aug. 5 to a Maine syndicate, represented by W. B. McKinley, of Chicago, and which controls the street car systems and the electric light plants in Joliet, Bay City, Champaign, Springfield, O.; Trenton, Mo., and other cities. The consideration was about $220,000. It is said that the syndicate will at once spend $100,000 for extensions and rolling stock.

MILWAUKEE, WIS.—The contracts for the construction of a new power house for the Milwaukee Electric Ry. Co. were awarded Aug. 3, as stated under Buildings; estimated cost, $600,000. It is said that the plant will be supplied with five 1,600-HP. engines, made by E. P. Allis & Co., and five boilers from the Edgemoor Iron Co.

SAN ANTONIO, TEX.—John H. Clark, of this city, was appointed receiver of the West End St. Ry. Co., by Judge Camp, Aug. 8, on application of the bondholders.

WHITTIER, CAL.—An ordinance has been passed granting a franchise to A. B. Patton to construct a cable or electric railway in this city.

## ELECTRIC LIGHT AND POWER.

MONTPELIER, VT.—We are informed that bids for constructing the power plant at North Duxbury or Bolton Falls for the Consolidated Lighting Co. of Montpelier will soon be received. The company expects to light about half a dozen villages, and to lease power for electric railways and other purposes. The plans and specifications are about ready. Des. Engr., H. W. Allen, Manchester, N. H.; C. P. Pitkit, Montpelier, is in charge of the work.

FRAMINGHAM, MASS.—Frank E. Henning, Town Clk., writes us that nothing will be done at present in regard to the proposed electric light plant.

PITTSFIELD, MASS.—Wm. Dodson, W. R. Hunnewell and J. W. Mason have been appointed a committee to consider the advisability of lighting the streets by electricity.

MYSTIC, CONN.—Bids will be asked about Sept. 1 for constructing a plant to cost about $25,000 for the Mystic Electric Light & Gas Co. We are informed that the plant will have arc and incandescent lights, 150-HP. steam plant with engine, and 15,000 light alternator, line, poles, etc. No contracts have been let yet. The plant will light Mystic and Stonington. Thos. C. Perkins, Gen. Mgr. and Des. Engr., Danforth, Conn.

HYDE PARK, N. Y.—Fred. W. Vanderbilt has authorized Owen Morris, Engr., Hyde Park-on-the-Hudson, to prepare plans for a stone masonry dam across the Crum Elbow Creek for a 6,000,000-gallon storage reservoir for electric and water power purposes on the estate.

BERLIN, PA.—G. B. Hough, of the Berlin Electric Light Co., writes us that the proposed plant will be put in operation about Sept. 1. The plant will have a 75-HP. Westinghouse engine, 750-light Westinghouse dynamo, 20 arc light Brush dynamo, 75-HP. Erie boiler, etc., to cost $5,000.

NEWPORT NEWS, VA.—The Newport News & Old Point Ry. & Electric Co. has applied for a franchise to Jan. 1, 1949. W. J. Payne, Pres. Newport News Gas Co., is interested. Mayor, A. A. Moss.

CHARLESTON, S. C.—The following bids were received Aug. 1 for installing a plant at Battery Jasper, Sullivan's Island, S. C., by Maj. H. C. Ruffner, U. S. Engr., Charleston, S. C.: General Electric Co., Schenectady, N. Y., $5,700; New York Finance & Construction Co., 141 Broadway, New York, $6,698; N. J. Foundry & Machinery Co., Jersey City, N. J., $5,632. Bidders specification, $5,542.

ELLISVILLE, MISS.—J. F. Parker, Mayor, writes us that no organized effort has been made to put in a plant.

NEW ORLEANS, LA.—An ordinance has been introduced calling for bids by the City Clerk until Jan. 2 for lighting the city with electricity, gas or oil; bond, $50,000.

DICKSON, TENN.—The Business Men's League is reported as considering the question of lighting the town by electricity.

FRANKLIN, KY.—The question of building a plant here is again being considered, according to reports.

LEXINGTON, KY.—The Triumph Electric Co., 859 Hathaway St., Cincinnati, O., has been awarded the contract for furnishing the asylum in this city with a plant. Prof. Paul Anderson may be addressed.

SOUTH CHARLESTON, O.—Wm. Cherry, Mayor, writes us that nothing definite has yet been done in regard to the proposed plant, reported in our issue of last week.

KOKOMO, IND.—Press reports state that applications for receiver for the Citizens' Electric Light & Power Co. of this place were filed Aug. 12, with claims aggregating $12,800, by the American Savings Bank, of Grand Rapids, Mich., the Capital City National Bank, and by Joseph L. Cohn, of Indianapolis. The corporation is capitalized at $40,000.

EATON RAPIDS, MICH.—Bids are asked until Aug. 20 for furnishing and putting in a water power plant in this place for A. R. Welch, of Chelsea, Mich. The plant will have 60 2,000-c. p. and 1,000 16-c. p. lights. It is proposed to install a direct-current 220-volt machine. Mr. Welch wishes samples of enclosed arc lamps. He will be in the market for everything except water wheels.

GRAND RAPIDS, MICH.—It is reported that the Consolidated Water Power Co. has decided to build a dam on the Wisconsin River. It will have a 30-ft. head; will furnish 12,000 HP. and will cost about $30,000. Engr., T. W. Orbison, Appleton, Wis.

JONESVILLE, MICH.—C. F. Wade, Pres., writes us that a committee is preparing a report on the advisability of putting in a plant. The report will soon be submitted.

MOUNT PLEASANT, MICH.—Chas. M. Brooks, Mayor, writes us that the question of building a plant in connection with the improvements to the water-works is being considered. The complete improvements will cost about $28,500. Population, 4,000.

SAULT STE. MARIE, MICH.—The American Lake Superior Power Co. has been granted a franchise, according to reports. Work on the plant, which will cost about $2,000,000, will be begun in a few weeks. The bids were received July 1, and the contract will be let at once. Ch. Engr., H. von Schon.

CHICAGO, ILL.—The Chicago Edison Electric Light Co. has completed the absorption of the following companies, according to reports: The Hyde Park Thomson-Houston Light Co., Hyde Park Electric Light & Power Co., People's Light & Power Co. (Hyde Park), People's Electric Light & Motor Power Co. (town of Lake), Mutual Electric Light & Power Co. (Hyde Park), Englewood Electric Light Co., West Chicago Light & Power Co., Western Light & Power Co. (Lakeview), Edgewater Electric Light & Power Co., Chicago Sectional Electric Light Underground Co., and Commonwealth Electric Light Co. The only electric light company not included in the deal is the Cosmopolitan Company. While it has a franchise and some wires laid, it has not yet got a plant. Arrangements have been made with a local syndicate to take $2,500,000 of first mortgage bonds to be issued by the Commonwealth Company under the terms of the trust deed to the Northern Trust Company. Of the money to be obtained by the sale of these bonds, which were disposed of at par, $2,000,000 is to go to pay for the first nine companies given in the above list. Of the $500,000 remaining $350,000 is to be used in construction work and $150,000 to pay off the old indebtedness of the Commonwealth Company.

MATTOON, ILL.—The Mattoon Light, Heat & Power Co. has been granted a 20-year franchise by the council and will at once begin building a plant. From the new plant power for fulfillment of the terms of the Somerville & Marks electric light contracts will be furnished, and the company also intends to furnish steam heat in the central district of the city. J. F. Marks, secretary and treasurer, writes us that the Mattoon Heat, Light & Power Co. has purchased a hot-water heating plant. The plants are owned by Somerville & Marks, who have incorporated the above company.

ROCK ISLAND, ILL.—Bids are asked until Aug. 27 for extending the wing dam of the water power pool for about 10,000 ft., etc. Capt. S. E. Blunt, U. S. A., Rock Island.

MARSHFIELD, WIS.—Bids are asked until Oct. 1 for lighting the city with 28 2,000-c. p. lights for terms of five and ten years. Population, 6,000. Henry Horn, Mayor; J. A. Thomas, Cy. Clk.

NEW PAYNESVILLE, MINN.—M. S. Elliott, Recdr., writes us that W. I. Gray & Co., 703 Sykes Block, Minneapolis, have been awarded the contract at $9,144 for building the plant and water-works. P. C. Pilon, Pres.

WINNEBAGO CITY, MINN.—A. C. Drew, Pres. Council, writes us that the matter of a plant will be taken up very soon.

**ABILENE, KAN.**—Bids are asked until Sept. 1 for furnishing and installing a plant about three miles from here for Jacob Brower & Co. The plant, which will be operated by water power, will have a capacity for 25 2,000-c. p. arc and 1,000 16-c. p. incandescent lights. Work will be begun soon as possible after Sept. 1. Correspondence is solicited.

**NATIONAL MILITARY HOME, KAN.**—Bids are asked until Aug. 24 for extending the plant at the western branch of the National Home for Disabled Volunteer Soldiers, according to reports. W. B. Shockley.

**PLEASANTON, KAN.**—The question of building a plant is being considered, according to reports.

**WELLINGTON, KAN.**—The council is considering the question of erecting a plant in connection with the proposed water-works, the two to cost about $125,000.

**REDLANDS, CAL.**—The certificate of the increase of the capital stock of the Redlands Electric Light & Power Co. was filed in San Bernardino Aug. 4 by W. J. Curtis, attorney for the company. The increase is from $200,000 to $500,000, and is made in order to extend the scope of the company's operations, improve the plant, circuit lines, property, etc. Directors, H. H. Sinclair, Chn.; F. G. Feraud, Secy.; J. F. Drake, J. H. Fisher and George B. Ellis.

**SAN JOSE, CAL.**—The mayor has recommended that a municipal plant be built at a cost of about $40,000.

**SHERBROOKE, QUE.**—Councilmen Q.ivier, Le Baron, Cate and Guay have been appointed a committee to consider the advisability of building a municipal plant.

**HAMILTON, ONT.**—S. H. Kent, Acting City Clerk, writes us that an engineer (Percy Domville, Hamilton,) has been appointed to report on the cost of a municipal plant. The present contract, which is said to be for 384 2,000-c. p. arc lights expires in 1900.

**LUNENBURG, N. S.**—It is stated that the Lunenburg Gas Co. has decided to install a plant on Mush-a-Mush River at the head of Mahone Bay, for the purpose of supplying Mahone and Lunenburg with an all-night electric service.

**BUENOS AYRES, ARGENTINE.**—Press reports state that machinery is being purchased for new plants in various cities of this country. The specifications call for American machinery. Carlos Bright, Civil Engr., Buenos Ayres, may be addressed.

**NEW COMPANIES.**—Mason Electric Light Co., Mason, Tex.; $5,500; L. Guggenheim, V. M. Loring, John Lemberg, Otto Donoh, Richard Grosse.

Berlin Electric Light Co., Berlin, Pa.; $4,000, with $400 paid in; W. S. Matthews, Berlin; J. A. Berkey, G. B. Haugh, J. M. Bricker, H. F. Barron, Somerset.

Mexico City Light, Heat & Power Co., New York; $5,000,000, with $150 paid in; Henry C. Bush, 32 Pine St., New York; Frank Johnston, Wm. C. Foster, Frederick Giblin, New York.

Lansdowne Electric Light Co., Lansdowne, Pa.; Tamany P. Street, Henry C. Staatzell, Richardson Shoemaker, J. Milton Lutz, Muntha J. Kelly.

## BRIDGES.

**RUMFORD FALLS, ME.**—The selectmen have awarded a contract to the New Columbus Bridge Co., Columbus, O., at $9,700, for constructing a 198-ft. single span bridge across the Androscoggin River.

**NORTHFIELD, MASS.**—The following bids were received by the county commissioners July 30 for constructing the superstructure of a bridge over the Connecticut River. Engrs., Edward S. Shaw, 12 Pearl St., Boston, and Clapp & Abercombie, Ponds Block, Greenfield, Mass.:

| | With wooden stringers. | With steel stringers. | Abutment piers. |
|---|---|---|---|
| Berlin Iron Bridge Co. | $28,791 | $30,800 | .... |
| Boston Bridge Works, Boston | 25,200 | 26,800 | $2,500 |
| Edge Moore Bridge Co. | 29,500 | 32,000 | 1,620 |
| New England Structural Co. | 23,980 | 25,713 | .... |
| King Bridge Co., Cleveland | 26,300 | 28,875 | 2,685 |
| N. J. Steel & Iron Co., Trenton* | 23,255 | 24,817 | .... |
| Pennsylvania Steel Co | 30,407 | 32,913 | .... |
| Pittsburg Bridge Co | 29,600 | 30,791 | 2,325 |
| Massillon Bridge Co. | 25,272 | 27,275 | 1,800 |
| Wrought Iron Bridge Co. | 29,900 | 32,200 | .... |
| Vermont Const'n Co., St. Albans | 24,000 | 25,200 | 2,680 |
| Youngstown Bridge Co. | 27,400 | 29,900 | 2,400 |
| Groton Bridge & Mfg. Co. | 26,500 | 28,000 | 2,400 |
| Canton Bridge Co., Canton, O. | .... | 27,587 | .... |
| Elmira Bridge Co., Elmira, N. Y. | 25,120 | 27,089 | .... |
| Horseheads (N.Y.) Bridge Co. | 26,300 | 27,500 | .... |
| Toledo Bridge Co., Toledo, O. | 27,300 | 29,300 | .... |
| Variety Iron Works Co. | 27,000 | 28,500 | .... |
| L. F. Kittredge & Son, Lowell | .... | .... | 2,350 |
| Flint Granite Co., Monson, Mass. | .... | .... | 3,500 |
| H. C. Wood, Westfield, Mass. | .... | .... | 1,948 |

*Awarded contract.

**NEW YORK, N. Y.**—John C. Rodgers has been awarded a contract, at $1,036,192, for the construction of the Willis Ave. bridge, over the Harlem River at 1st Ave. The itemized bids were in our issue of Sept. 23, 1897. Jno. L. Shea, Comr. Bridges, Stewart Bldg.

**OWEGO, N. Y.**—The town board has appropriated $2,500 for the construction of two bridges.

**LANDENBURG, PA.**—A contract has been awarded by the county commissioners to the Schuylkill Bridge Co., Phoenixville, Pa., at $1,785, for constructing a 76-ft. iron bridge over White Clay Creek.

**NEWPORT NEWS, VA.**—The committee has submitted a report to the council, recommending that bids be asked for furnishing plans and for constructing two bridges, one at 34th St. and one at 25th St.

**CHILLICOTHE, O.**—The county commissioners have awarded a contract to the King Bridge Co., Cleveland, O., at $11,500, for the superstructure of the Main St. bridge; also to the Iron Substructure Co., Columbus, O., at $1,295, for the Deer Creek bridge.

**LORAIN, O.**—The county commissioners, Elyria, O., have engaged F. C. Osborn, Cleveland, O., to prepare specifications for the construction of a 120-ft. span bridge at Erie Ave. Bids will soon be asked.

**TIFFIN, O.**—Bids are asked until Aug. 20 for building a bridge in Pleasant township. Address the county auditor.

**GRAND RAPIDS, MICH.**—The Toledo Bridge Co., Toledo, O., has been awarded a contract, at $8,600, for constructing two bridges, 550 and 250 ft. long respectively, on the Muskegon and North Muskegon roads.

**ONTONAGON, MICH.**—Bids are asked until 10 a. m., Aug. 19, for constructing an iron bridge across the Iron River, in Carp Lake township. W. N. Cunningham, Highway Comr.

**CHICAGO, ILL.**—Press reports state that the engineering department has prepared plans and estimates for replacing a number of bridges along the river with bascule structures, to cost about $5,000,000. Bonds will be issued.—Scherser Rolling Lift Bridge Co., Monadnock Block, Chicago, has been awarded a contract, at $389,140, for constructing the Campbell Ave. bridge, according to reports.

**PARK FALLS, WIS.**—Bids are asked by the city clerk until 2 p. m., Aug. 18, for constructing a wooden and iron bridge over the Flambeau River. W. F. Turner, Chn.

**CHOTEAU, MONT.**—Bids are asked until Sept. 6 for constructing a steel or iron bridge over the Marias River. A. C. Warner, County Clk.

**ST. JOSEPH, MO.**—Bids will soon be asked by the council for the construction of the South 6th St. viaduct, according to reports.

**PUEBLO, COLO.**—New bids will be asked for constructing the First St. bridge. Mayor Orman may be addressed.

**PENDLETON, ORE.**—Bids are asked until Sept. 7 for constructing two bridges. B. S. Borroughs, County Clk.

**CHEHALIS, WASH.**—Bids are asked until Aug. 20 for constructing three bridges over the Chehalis River, to cost about $15,000. Allen P. Schooley, County Audr.

**CHEHALIS, WASH.**—Reports state that a contract has been awarded to the Columbia Bridge Co., Portland, Ore., for constructing a steel bridge at Gray's Harbor, to cost about $9,000.

**NEVADA CITY, CAL.**—County Supervisor Buffington has been authorized to prepare plans for a bridge over Greenhorn Creek.

**LOS ANGELES, CAL.**—Bids are asked until Sept. 19 for the purchase of $23,000 of 4% bridge bonds. C. H. Hance, Cy. Clk.

**SAN JOSE, CAL.**—Bids are asked by the county clerk until Sept. 6 for constructing a bridge over Stevens Creek.

**STOCKTON, CAL.**—D. Tumelty & Son have been awarded a $3,587 contract by the county supervisors, for constructing a steel bridge across Mokelume River.

**MOUNTAIN HOME, IDAHO.**—Bids are asked until Sept. 15 for moving and repairing the birdge over South Boise River, at Pine Grove. W. H. Manion, County Clk.

**ARNPRIOR, ONT.**—Bids are asked until Aug. 30 for constructing an iron bridge over the Madawaska River. Frank A. Hibbard, Engr., Ottawa, Ont.; Sam. Kedey, Chn. Com.

**ST. JOHN, N. B.**—Bids are asked until Aug. 20 for painting the cantilever bridge and western trestle. T. B. Robinson, Secy. St. John Bridge & Ry. Extension Co., 103 Prince William St.

## BUILDINGS.

**BOSTON, MASS.**—Bids are asked by the city school committee, Mason St., until Aug. 22, for erecting a high-school building at South Boston; bond required, $30,000. Arch., Herbert D. Hale, 13 Exchange St.

**BRIDGEPORT, CONN.**—Plans are asked until about Jan. 1 for the new city hall building, to cost about $150,000. Dr. C. Lincoln Banks, Chn. Com.

**BUFFALO, N. Y.**—Bids are asked by the department of public works until Aug. 25 for the installation of a ventilating plant for the chemical laboratory at the Masten Park High School; also until Aug. 31 for the erection of a brick lavatory at School No. 35, etc.—Bids are asked by the park commissioners until Aug. 26 for the construction of a series of propagating houses in Delaware Park.

**ELLIS ISLAND, N. Y.**—The contract for erecting the five buildings on Ellis Island, in New York Harbor, for the new immigrant station, has been awarded to R. H. Hood & Co., St. Paul Bldg., 220 Broadway, New York, on slightly revised plans, at $419,298. The full list of bids received by the supervising architect on July 30 was published in our issue of Aug. 4.

**NEW YORK, N. Y.**—Bids are asked by the department of public buildings, lighting and supplies, at 346 Broadway, until Aug. 23, for erecting two Otis hydraulic passenger elevators in the brownstone building, City Hall Park, and for the construction and erection of wrought iron balcony, with stairs leading to same, and for new bookcases in the room known as the Library of the Supreme Court, in the County Court-House in City Hall Park, Borough of Manhattan.—Bids are asked by the department of health, at Criminal Court Bldg., until Aug. 24, for alterations to the disinfecting depot, foot of East 16th St.—Plans have been filed by Lorenz F. J. Weiher, Jr., Owner and Architect, 125th St. and Park Ave., for three 5-story brick flat buildings at Brook and Elton Aves., to cost $50,000; by Henriette K. White, 208 West 118th St., for a 10-story brick flat and store building at 80th St. and Columbus Ave., to cost $235,000. Arch., Henry F. Cook, 111 5th Ave.; by Neil Hansen, 647 Amsterdam Ave., for three 5-story brick flat and store buildings at Amsterdam Ave. and 147th St., to cost $60,000. Archs., Angell & Higginson, 106 Fulton St.; by J. W. Simpson, 34 West 20th St., for a 4-story brick and stone dwelling on 5th Ave., near 74th St., to cost $50,000, and for an adjacent building to cost $45,000. Arch., C. P. H. Gilbert, 1123 Broadway.—The contract for erecting the masonry of the new building for the St. Jerome Roman Catholic Church, at 137th St. and Alexander Ave., is said to have been let to Henry McNally, 287 4th Ave., and for the carpentry contract, to William Burns, 287 4th Ave.; estimated cost, $80,000. Archs., Delhi & Howard, 1193 Broadway.—D. C. Weeks & Son, 289 4th Ave., have the general contract for erecting a 12-story store and office building at 110 to 116 Nassau St., for Levi P. Morton. Archs., Clinton & Russell, 32 Nassau St.

**OGDENSBURG, N. Y.**—The following bids were received by the supervising architect, Washington, D. C., Aug. 9, for the removal of the old heating and ventilating apparatus, and for installing a new heating and ventilating apparatus in the U. S. building at Ogdensburg:

| | | Time. |
|---|---|---|
| Blake & Williams, New York | $5,261 | Oct. 1 |
| Edward Joy, Syracuse, N. Y. | 5,950 | 2 mos. |
| Edward P. Bates, Syracuse, N. Y. | 4,835 | Oct. 1 |
| Chas. Lavies, Ogdensburg | 4,806 | " |
| E. Rutzler, New York | 5,291 | " |

**ORIENT POINT, N. Y.**—The following bids were received by Lt.-Col. D. P. Heap, U. S. Engrs., Tompkinsville (S. I.), N. Y., Aug. 11, for furnishing the material for and erecting the Orient Point light station, as advertised in Engineering News:

| | |
|---|---|
| Allentown Rolling Mills, Allentown, Pa. | $9,912 |
| Atlanta Machine Works, Atlanta, Ga. | 10,380 |
| Chamblin & Scott, Richmond, Va. | 10,568 |
| John P. McGuire, 51 Scranton Ave., Cleveland, O. | 10,800 |
| Tacony Iron & Metal Co., Philadelphia, Pa. | 13,500 |
| Russel Wheel & Foundry Co., Detroit, Mich. | 13,970 |
| M. H. Treadwell & Co., 120 Liberty St., New York | 14,434 |
| Chas. L. Rowland, 102-114 Greene St., Brooklyn, N.Y | 15,750 |

**ROCHESTER, N. Y.**—A. W. Van Alstyne has been awarded the contract for the carpentry work at School No. 19, at $9,885.

**HAMILTON, N. J.**—Bids are asked by the board of education until Aug. 18 at 3 p. m., for erecting a 4-room brick school building; deposit required, $500. Pres., John Sykes, 111 East State St. Arch., W. A. Poland, 11 West State St., both of Trenton, N. J.

**WEST HOBOKEN, N. J.**—A brick, stone and iron addition to the Hudson County Savings Institution will soon be erected on Spring St., at a cost of about $35,000. Arch., Herman Kreikler, 62 Broad St., New oYrk.

**CORRY, PA.**—J. A. Nixon, of Titusville, Pa., has been awarded the contract for erecting the high school building at $21,555. Archs., McCollum & Ely, Washington, Pa.

**GLENSHAW, PA.**—Bids are asked by the directors of Shaler township until Aug. 20 for the erection of a second-story to the school building at Glenshaw. Secy., Jacob Ochsenhirt.

**PACKERTON, PA.**—Bids are asked, according to reports, for the erection of a 2-story brick and iron storehouse, 73 × 301 ft., for the Lehigh Valley R. R. Co. C. E. Webster, Ch. Engr., South Bethlehem, Pa.

**WASHINGTON, PA.**—Bids are asked by the town council of this borough until Aug. 22 for the removal of the buildings within the lines of Brownson Ave. Secy., J. N. White.

**WILMINGTON, DEL.**—Bids are asked until Aug. 20, extension of time from Aug. 8, for the erection of a new high school building on Delaware Ave. William Turner, Chn. Bldg. Com.

**LAUREL, MD.**—Jas. T. Loveless, Washington, D. C., was awarded the contract, Aug. 10, for the construction of the new high-school building, complete, at $8,345.

**WASHINGTON, D. C.**—Dr. G. F. Whiting will build at once an office building at No. 1331 F St., N. W. Arch., W. M. Poindexter, 806 17th St., N. W.—J. M. Dunn has been awarded the contract for constructing an addition to the station house on 5th St., N. W., at $4,649.

**PETERSBURG, VA.**—The Pittsburg Heating Supply Co. was the lowest bidder, Aug. 15, on the installation of a heating apparatus in the U. S. building in this city, at $1,194; time, 40 days.

**MARIETTA, GA.**—Bids are asked until Aug. 20 for the erection of a new Methodist Church building. T. M. Brumby, Chn. Com.; Hayden & Wheeler, Archs., Equitable Bldg., Atlanta, Ga.—Bids are asked until Sept. 29 for a 3-story brick and marble court house, 60 × 80 ft., for Cobb county. Archs., Golucke & Stewart, 24½ Whitehall St., Atlanta.

**NEW ORLEANS, LA.**—A fire in this city, Aug. 10, destroyed the Osborne Turkish baths, on Bourbon St., and several adjacent buildings; reported loss, $200,000.

**KNOXVILLE, TENN.**—The following bids were received by the supervising architect Aug. 11 for removing old and constructing new heating apparatus for the U. S. building at Knoxville: E. Rutzler, New York, $6,144, time, Oct. 1; Pittsburg Heating Supply Co., Pittsburg, Pa., $5,396, Sept. 30; Blake & Williams, New York, $6,436, Oct. 1; Chafer & Becker, Cleveland, O., $5,382, 4 mos.

**LEXINGTON, KY.**—Bids are asked until Sept. 1 for the installation of the lighting, heating and ventilating plants for the court house of Fayette county, as stated in our advertising columns. Address Judge Frank Bullock, Lexington; Arch., F. Paul Anderson, State College of Kentucky, Lexington.

**MARION, O.**—Bids are asked until Aug. 22 for erecting a 4-room brick school building. Frank E. White, Clk. Bd. of Education; Sloan & Ault, Archs.

**TOLEDO, O.**—M. Rabbet, of Toledo, has been awarded the contract for erecting the new county jail building, except jail iron work, at $56,673.

**WARREN, O.**—Bids are asked until Aug. 25 for remodeling the city hall, according to plans on file with the city engineer. A. E. Andrews, Cy. Clk.

**CHICAGO, ILL.**—Bids are asked by the board of education until Aug. 19 for laying cement floors in sundry school buildings; also until Aug. 26 for erecting a school building on Oakley Ave., between Division St. and Potomac Ave., and for improvements to other school buildings.

**DANVILLE, ILL.**—Bids are asked until Aug. 25 for the erection of a coal house at the Danville branch of the National Home for Disabled Volunteer Soldiers. Address W. C. Gunnell, C. E., Post Office Bldg., Danville.

**DUNNING, ILL.**—Bids are asked by the commissioners of Cook county until Sept. 5 for the labor and material for a dynamo and engine at the county poor house. E. D. Northam, Supt. of Pub. Service.

**DES MOINES, IA.**—Bids are asked until Sept. 1 for erecting a 2-story brick block, 67 × 133 ft., on West 7th and Locust Sts., for Mrs. C. S. Worse. Archs., Proudfoot & Bird.

**FOREST CITY, IA.**—Bids are asked until Aug. 22 for a brick public library building. Secy., F. J. Ward, Forest City.

**CROOKSTON, MINN.**—Bids are asked until Aug. 25 for erecting a 3-story brick business building. Address J. W. Wheeler, First National Bank.

**MINNEAPOLIS, MINN.**—Bids are asked by the board of charities until Aug. 22 for the labor and material required for the excavation, brick, terra cotta and structural iron and steel for the east ward of the city hospital. Secy., O. B. King; Archs., MacLeod & Lamoreaux, 712 Lumber Exchange.

**ST. PETER, MINN.**—Bids are asked until Aug. 24 for a steam heating plant for the court-house. Charles Hensel, County Audr.

**MILWAUKEE, WIS.**—Contracts have been let for the construction of the new power house for the Milwaukee Ry. & Light Co., to cost about $600,000. The interior steel construction work will be done by W. R. Roberts & Co., of Chicago; the brick and mason work, by the Paul Reisen Co., of this city; the sidewalks, floors, roofs, etc., by the Northwestern Tile & Cement Co.; the terra cotta trimmings, by Evans & Howard, of St. Louis.

**LINCOLN, NEB.**—John Roberts, of Lincoln, was the lowest bidder for a heating and ventilating apparatus for the U. S. building, at $2,399; time, 55 days.

**SOUTH OMAHA, NEB.**—Bids are asked by the supervising architect, Washington, D .C., until Sept. 7, for a low-pressure steam heating and ventilating apparatus for the post-office building in this city, as stated in our advertising columns.

**BISMARCK, N. DAK.**—It is reported that the total loss from the fire in this city on Aug. 8 will be about $600,000; insurance, $250,000. Among the losers are the First National Bank, the post-office, C. H. Phelps and Joseph Hare.

**DONIPHAN, MO.**—Ripley county has decided by popular vote to issue $20,000 court-house and jail bonds. Bids for the purchase of the bonds will soon be asked.

**KANSAS CITY, MO.**—William Harmon has been awarded the contract for the reconstruction of the Union station, at about $42,000. Archs., Van Brunt & Howe, 1214 Main St., Kansas City.

**GOLIAD, TEX.**—Bids are asked until Sept. 3 for reconstructing the Goliad county jail. Henry Shaper, County Judge.

SAN ANTONIO, TEX.—Plans and specifications are asked by the city council until Sept. 5 for a one-story central market house to be erected on Paschal Square at a cost of about $10,000; first prize, $500; second prize, $250. Mayor, Bryan Callaghan; Cy. Clk., Theo. Vinke.

COLORADO CITY, COLO.—Reports state that the Manitou & Pike's Peak R. R. Co. has signed a contract for a large observatory to be built on the top of Pike's Peak.

CHEMAWA, ORE.—Bids are asked until Aug. 27 for erecting one brick school and assembly building for the Indian Industrial School. Supt., Thos. W. Potter.

PORTLAND, ORE.—The supervising architect, Washington, D. C., received the following bids Aug. 8 for plastered models for the U. S. Custom House building in this city: Jas. F. Earley, Washington, D. C., $508, time 42 days; C. W. Buhler, Washington, D. C., $415, time, 48 days.

FRESNO, CAL.—A fire in this city Aug. 10, destroyed $500,000 worth of property on the Southern Pacific Co.'s reservation, from Mariposa St. to Mono St.

LOS ANGELES, CAL.—Bids are asked by the supervisors of Los Angeles county until Sept. 14 for the construction of a brick building for the county hospital. T. E. Newlin, County Clk.

UKIAH, CAL.—Bids are asked until Sept. 3 for erecting an administration building for the Mendvano State Hospital. Secy., W. W. Cunningham; Archs., Cunningham Bros. San Francisco, Cal.

WHEATLAND, CAL.—The business portion of this town was burned Aug. 12, causing an estimated loss of $185,000; insurance, about one-half of loss.

LOVELOCKS, NEV.—Bids are asked until Sept. 19 for constructing a jail building here for Humboldt county. Geo. E. Miller, County Clk., Winnemuca, Nev.

HALIFAX, N. S.—Bids are asked by the Intercolonial Ry. Co. until Aug. 22 for the erection of a grain elevator at Halifax. D. Pottinger, Gen. Mgr., Moncton, N. B.

QUEBEC, QUE.—Reports state that Joseph Gosselin, of Levis, has been awarded the contract for erecting new buildings for Judge Chauveau on the site of the old city hall; estimated cost, $75,000.

ARNPRIOR, ONT.—Bids are asked by the department of public works, at Ottawa, Ont., until Aug. 22, for the construction of a heating apparatus in the public building in Arnprior. Secy., E. F. E. Roy.

INGERSOLL, ONT.—Bids are asked by the department of public works until Aug. 23 for the construction of a building in this city. Secy., E. F. E. Roy, Ottawa, Ont.

NIAGARA FALLS, ONT.—Bids are asked until Aug. 20 for the identical reconstruction of the Clifton House, recently destroyed by fire. Darling & Pearson, Toronto Ry. Chambers, Toronto, Ont., Architects for Bush Estate.

## WATER-WORKS.

AUBURN, ME.—E. S. Paul, A. M. Pulsifer and R. M. Mason have been appointed a committee to investigate the question of a pure water supply from Lake Auburn.

PITTSFIELD, MASS.—F. E. Hatch, Supt. water-works, writes us that the proposed Tillotson extension, noted last week, has not as yet been definitely decided upon.

NEW HAVEN, CONN.—A resolution has been adopted by the council authorizing the appointment of a joint committee to investigate the question of the municipal ownership of the water-works, gas plants, street railways, etc., of the city. Councilman O'Sullivan may be addressed.

ALBANY, N. Y.—Stone & Thurston, 220 Broadway, New York, have been awarded the contract for furnishing and building the pumping station and intake at the filtration plant at $22,977, instead of $2,977, as noted in our issue of last week. The prices for the various items of the work are given under Contract Prices.

CATTARAUGUS, N. Y.—W. B. Wilson, Buffalo, N. Y., has been awarded the contract for extending the works, at a cost of about $7,000.

CROWN POINT, N. Y.—The Crown Point Water-Works Co. has been incorporated with a capital stock of $5,000 by James E. Pond, Freeman C. Pond, Margaret A. Pond, Ruth D. Pond, Elbert M. Johnson, Lysander R. Berry and Edwin R. Eaton, all of Crown Point. J. E. Pond is the owner of the small works built in this place in 1895.

CROWN POINT, N. Y.—J. E. Pond, Pres. and Supt. Crown Point Water-Works Co., writes us that contracts will be let Aug. 20 for furnishing four bends, one cross, four gates, valves, etc., for the proposed improvements to the works put in three years ago.

ELLIS ISLAND, N. Y.—The following bids for water supply pipe from Jersey City to Ellis Island, N. Y. H., were received by the treasury department Aug. 8:

| Bidder. | | Time, days. |
|---|---|---|
| Merritt & Chapman D. & W. Co., New York.. | $16,744 | 60 |
| Holmes & Cogan, Jersey City ..... | 14,045 | 50 |
| Geo. B. Inman, New York ..... | 13,300 | 40 |
| Jno. Cornwell, Jr., New York..... | 32,000 | 58 |
| J. T. Brown, New York ..... | 12,970 | 60 |
| Jno. McNamee, Brooklyn, N. Y..... | 15,500 | 60 |
| Jno. R. Sheehan, New York..... | 12,700 | 60 |

JOHNSTOWN, N. Y.—An election will be held Aug. 23 to vote on the question of building a reservoir, etc., for an additional water supply, to cost about $75,000. A. J. Nells, Cy. Attorney.

RHINEBECK, N. Y.—We are informed that the city has not come to any conclusion in regard to works, noted in our last issue. The question will be submitted to the voters at the next election. Population, 1,500. Frank Latson, Pres. Village Bd.

ROME, N. Y.—Chas. C. Hopkins, Cy. Engr., writes us that none of the bids recently received for an auxiliary pumping plant was accepted. The commissioners now favor submitting to a vote of the taxpayers the question of a gravity supply from Fish Creek or Mohawk River, in accordance with plans prepared in 1897 by the Stanwix Engineering Co., Rome. Estimated to cost from $110,000 to $162,000, depending upon source and capacity.

BRIDGETON, N. J.—Timothy Woodruff, Supt. water-works, informs us that the following bids were received Aug. 12 for furnishing and installing a 100-ft. steel water tank:

| | |
|---|---|
| Tippett & Wood, Phillipsburg, N. J..... | $9,497 |
| New Jersey Steel & Iron Co., Trenton, N. J..... | 8,180 |
| Riter-Conley Co., 29 Cortlandt St., New York..... | 8,611 |
| Sotter Bros., Pottstown, Pa..... | 10,650 |
| *J. H. & F. Ferguson, agents, Betz Bldg., Phila. | 7,097 |
| R. D. Wood & Co., 400 Chestnut St., Philadelphia. | 8,120 |
| Warren City Boiler Works, Warren, O..... | 7,450 |
| Cox & Sons Co., Bridgeton, N. J..... | 11,474 |
| Broomell, Schmidt & Co., York, Pa..... | 8,707 |
| Youngstown Bridge Co., 150 Nassau St., N. Y... | 7,242 |
| Leighton Lea, Girard Bldg., Philadelphia..... | 7,180 |
| Wilkins & Kuemmerle, Betz Bldg., Philadelphia. | 10,525 |

*Awarded contract, agents for E. Keeler Co., Williamsport, Pa.

GLOUCESTER CITY, N. J.—Bids are asked until Sept. 1 for furnishing and erecting a 2,500,000-gallon pump at the water-works, as stated in our advertising columns. W. J. Thompson, Chn. Com.; D. F. Lane, Cy. Clk.

JERSEY CITY, N. J.—Bids are asked until Aug. 24 for furnishing a large number of ⅝ to 10-in. water meters. Geo. T. Bouton, Clk. Comrs.

ORANGE, N. J.—The city engineer is preparing plans for a pumping station at Campbell's Pond, Millburn, and for deepening and cleaning the pond; estimated cost, $25,000.

SENECA FALLS, N. Y.—The question of the municipal ownership of the works and the electric light plant is being considered.

DEVON, PA.—Bids are asked until Aug. 22 for constructing a 4,000,000-gallon reservoir at Devon for the works owned by the American Pipe Mfg. Co., as stated in our advertising columns. Ch. Engr., J. A. Ledoux, Fidelity Mutual Life Bldg., Philadelphia.

DU BOIS, PA.—D. S. Herron, Cy. Solicitor, writes us that there is no prospect of anything being done to secure an increased water supply.

EVANS CITY, PA.—Geo. Fehl, Pres. Council, writes us that plans for the proposed works are not completed. The supply will be secured from small streams. Population, 1,400. Engr., J. P. Leaf, Rochester, Pa.

GROVE CITY, PA.—Chandley Bros. & Co., Beaver Falls, Pa., have been awarded the contract at $15,000 for building the new works, according to reports.

HARRISBURG, PA.—Bids are asked until Aug. 23 for laying a 6-in. water pipe in Second St. E. Mather, Pres.

HASTINGS, PA.—The Susquehanna Water Co. has been incorporated with a capital stock of $500 by Col. J. L. Spangler, Bellefonte, Pa.; W. P. Duncan, Philipsburg; R. B. Spangler and C. F. Fraser, Hastings, and James A. McClain.

McDONALD, PA.—Bids are asked until Aug. 25 for constructing a storage dam for the Citizen's Water Co., as stated in our advertising columns. Engr., K. S. Smith, Carnegie Bldg., Pittsburg, Pa.; Secy., E. S. McWreath.

MILLVALE, PA.—At the election in November this place will vote on the question of issuing $5,000 in bonds for a new pump, $10,800 for a town hall, etc. H. I. Riley, Borough Solicitor. P. O., Bennett, Pa.

BALTIMORE, MD.—The council committee on health has decided that a filtration plant is necessary for the Lake Roland water supply. G. Stewart Johnston, Chn. Com.; Dr. H. H. Imholfe, Acting Chn. Com.

CUMBERLAND, MD.—E. A. Wilder, Fredonia, N. Y., has submitted a proposition to put in a filtration plant at this place, to cost about $38,000.

PALATINE, W. VA.—C. W. Walker, Asst. P. M., writes us that the city will complete the works this fall. The contract has not yet been let. Population, 1,600. Des. Engr., J. M. Prickett; Chn. Com., T. D. Harden.

PARKERSBURG, W. VA.—John V. Dunbar, Cy. Engr., writes us that this city will vote Aug. 30 on the question of issuing $35,000 in bonds for increasing the storage capacity of the reservoir and for extending the water mains, etc. No plans have yet been prepared.

DAVIDSON, N. C.—W. J. McKay, Mayesville, S. C., Pres. Bd. Trustees, Davidson College, writes us that the board has resolved to have works built at the college as quickly as possible. A committee has been appointed to secure plans and estimates. Address Prof. H. L. Smith, Chn. Water Com., Davidson, N. C.

ROME, GA.—H. M. Smith, Cy. Engr., writes us that the city is investigating the filter question, and will soon decide upon some plan. Mr. Smith writes that in the meantime those who have filters to place or plans to submit may take advantage of this opportunity. The daily consumption is about 1,500,000 gallons, river water.

DRY TORTUGAS, FLA.—Philadelphia papers state that the construction bureau, navy department, has awarded the contract for the construction of a distilling plant on Dry Tortugas Island to the Sugar Apparatus Mfg. Co., Philadelphia. This island is about 60 miles west of Key East, the extreme of the Florida keys, and has been used as a naval watering station for a number of years. An old fort is situated here, and a small garrison is generally kept on duty. S. Morris Lillie, President of the successful company, who prepared the plans for the new plant, states that it will cost about $35,000, and will have a capacity of 60,000 gallons of distilled water each 24 hours. The method is the same as that followed in a number of sugar refineries. At present the sole source of water supply is by cisterns for holding rain water.

MONTGOMERY, ALA.—The city engineer has been directed to prepare plans, etc., for covering the reservoirs of the water-works at the Court St. station. C. P. Hardaway, Cy. Clk.

LOUISVILLE, KY.—Bids are asked by the Louisville Water Co., 549 3d St., until Sept. 1 for the construction of a clear-water reservoir and filter house, grading and paving roads and disposing of waste material at Crescent Hill. Local papers state that the work will be a filtration plant, stand-pipe and pumping station. The new reservoir will be connected with the old one and will have a capacity of 25,000,000 gallons, or one-fourth the capacity of the old one. The water will pass from the present reservoir into the filter station and thence to the new tank from which it will be pumped into a stand-pipe. The passage between the reservoirs will lower the water 35 ft. below the present reservoir. Check, $10,000; bond, $100,000. Chas B. Long, Pres.

CHARDON, O.—H. O. Bostwick, Mayor, writes us that the subject of works to be owned by the village is being considered. No definite steps have been taken in the matter as yet.

CINCINNATI, O.—Bids are asked until Aug. 19 for furnishing such supplies as may be required by the water department for the year ending Jan. 1, 1899. A. B. Battermann, Pres. Bd. City Affairs.

AUBURN, IND.—We are informed that this place is still considering the question of works.

ALLEGAN, MICH.—The question of a new pump and pumping station, to cost about $20,000, is being considered. Trustee Priest may be addressed.

BAY CITY, MICH.—Bids are asked by the city clerk until Aug. 22 for laying new 6-in. water mains in Walnut St.

MOUNT PLEASANT, MICH.—Chas. M. Brooks, Mayor, writes us that the council is considering the question of overhauling and enlarging the works. Nothing definite has been decided upon as yet. The cost will be about $20,000 for improving the works alone or $28,500 with an electric light plant added.

CHICAGO, ILL.—Bids are asked until 11 a. m., Aug. 18, for furnishing such special castings for water pipe as may be required during the year ending July 31, 1899; check, $500. L. E. McGann, Comr. Pub. Wks.

DUBUQUE, IA.—We are informed that nothing definite has been done in regard to the city purchasing the works of the Dubuque Water Co. The city is figuring with the company with a view to buying the works. E. C. Blake, Cy. Engr. Press reports state as follows: As the outcome of the bad water recently furnished this city by the water company, the council has revoked the company's charter. The minor stockholders of the company have made a proposition to the council looking towards a permanent improvement of the plant with a cheapening of the cost to the consumers.

NEW SHARON, IA.—Jackson & Moss, Des Moines, Ia., have begun the construction of the proposed works, to cost $8,500, according to reports.

OSAGE, IA.—Chas. Kathan, Mayor, writes us that at the election held Aug. 5 this place decided to put in works by a vote of 5 to 1. The supply will be secured from deep wells. An elevated tank will probably be erected. There will be two wells with complete pumping outfit. Nearly five miles of mains will be laid and 50 hydrants set. The contract for wells has been let. It is expected to advertise for a tank and mains in a few days; estimated cost, $25,000. J. P. Williams, Chn. Com.

LANESBORO, MINN.—Bids are asked until Sept. 1 for furnishing and laying about 10,000 ft. of 4 to 8-in. water pipe, etc. Engr., Geo. Bradish, La Crosse, Wis.; Clk., O. M. Habberstad.

NEW PAYNESVILLE, MINN.—M. S. Elliott, Recdr., writes us that the following bids were received Aug. 8 for furnishing and building works and an electric light plant; P. C. Pilon, Village Pres.:

| | |
|---|---|
| Daniel W. Mead, Rockford, Ill..... | $9,790 |
| Patrick Doherty, St. Paul..... | 9,571 |
| Fairbanks, Morse & Co., St. Paul, Minn. ..... | 10,119 |
| W. I. Gray, Minneapolis (accepted)..... | 9,144 |

DEADWOOD, S. DAK.—The council has accepted the proposition to secure an additional water supply from Gayville. A dam 75 ft. long and 6 ft. high will be built at once, according to reports. Mayor Star, Alderman Treber, Chn. Com., and F. C. Tucker, Cy. Engr., may be addressed.

LINCOLN, NEB.—The council has voted that water meters must be used by all consumers of water. Local papers state that about 2,000 meters will be required.

WELLINGTON, KAN.—B. F. Evans, Newton, Kan., has been awarded the contract to sink a test well for the proposed new municipal works, to cost about $125,000.

SEDALIA, MO.—Eastern parties are reported to have purchased the works of the Sedalia Water & Light Co. It is stated that the works will be improved and that a better and increased water supply will be furnished. Col. O. A. Crandall is interested in the new company.

WEBSTER GROVES, MO.—The council, it is reported, will soon ask for bids for the purchase of $5,000 of 20-year 5% bonds for the proposed works; the supply to be secured from the St. Louis works.

McKINNEY, TEX.—Press reports state that bids will soon be asked by the council for furnishing and constructing the proposed works, the bonds for which have been sold; estimated cost, $18,000. J. M. Pearson, Mayor.

GUTHRIE, OKLA.—G. M. De Groff, Cy. Clk., writes us that the two bids received July 5 for furnishing a new water supply have been rejected.

SHAWNEE, OKLA.—Another election will be held Sept. 2 to vote on the question of building works, to cost about $10,000. Benj. Diesker, Cy. Clk.

ALTMAN, COLO.—Press reports state that William Gilpatrick, formerly connected with the Altoona Light, Water & Power Co., has purchased the works from John A. Brod & Co. and will at once begin extending the water mains from Middle Beaver Creek to the towns of Goldfield and Independence.

FLORENCE, COLO.—P. M. McGuire, Mayor, writes us that Hiram Phillips, Oriel Bldg., St. Louis, Mo., is making a survey and plans for the proposed gravity works. Population, 4,500.

SEATTLE, WASH.—Capt. W. W. Robinson, Jr., Assist. Q. M. in charge of the construction of the army post, has issued a call for bids for the construction of 2,200 ft. of 6-in. water main from the east line of the army post to the site of the buildings. The main will connect with the main now being laid by the city to the post.

SEATTLE, WASH.—The council has voted to direct the judicial committee to prepare a resolution directing the board of public works to ask for new bids for constructing the Cedar River water-works addition.

WASCO, ORE.—The council is reported to have voted to build works at a cost of about $2,500.

SAN FRANCISCO, CAL.—The Spring Valley Water-Works Co. has voted to issue $4,000,000 in 4% bonds. The bonds will be issued under a third mortgage, to bear date Sept. 1, 1898, payable in eight years from date. It is said that the company proposes to use the money thus obtained for the erection of pumping works deemed now to be necessary owing to the recent drouth.

WILLOWS, CAL.—Bids are asked until Sept. 5 for furnishing and installing a water tank, etc., at the county hospital. Clk., W. H. Sale.

PHOENIX, ARIZ.—We are informed that this city contemplates the erection of municipal works. There will be 16 miles of 6 to 20-in. cast-iron water pipe, a pumping station of 4,000 gallons a minute, an elevated tank, 35 ft. in diameter and 50 ft. in height, placed on a 100-ft. steel framed base. Plans, specifications, etc., are being prepared by Ernest Abs Hagen, 338 Byrne Bldg., Los Angeles, Cal., and Hotel Adams, Phoenix. Mayor, J. C. Adams.

SUTTON, QUE.—C. A. Tartre, Secy. Treasury, writes us that the proposed works are being built by the city at a cost of about $13,000. Population, 800.

RIVER DU LOUP, QUE.—It is reported that this place will soon begin the construction of the proposed works. Engr., Walter Shanley, St. Lawrence Hall, Montreal, Que.

## IRRIGATION.

CANON CITY, COLO.—A. A. Maclean and Herman H. Dunham are to construct a canal along Beaver Creek, about six miles long and 12 ft. wide, to irrigate about 22,000 acres in Tremont county.

DUPUYER, MONT.—Reports state that M. S. Darling, Fort Benton, is making surveys and estimates for an irrigation system from Birch Creek to the lower Dupuyer River. W. G. Conrad, Kyle Brice and C. E. Conrad, of Great Falls, Mont., are interested.

NEW COMPANIES.—North Loup Improvement Co., Loup City, Neb.; $3,000; J. P. Goodrich, A. T. Jones and George E. Johnson, North Platte, and C. E. Coffin, Lincoln.

## SEWERAGE.

BROOKLINE, MASS.—Jos. Driscoll has been awarded the contract for building a main sewer in Beacon St. at $1,855.

CLINTON, MASS.—Bids are asked until Sept. 1 for constructing sections 1 and 2 of the system, reservoir, pumping station, etc., as described in our advertising columns. Wm. N. Davenport, Secy. Metropolitan Water Bd., 3 Mt. Vernon St., Boston.

NEW BRITAIN, CONN.—M. O. Webster, Mayor, writes us that the question of sewage disposal is being investigated. No decision has been arrived at as to what changes will be made. The city has 27 miles of sewers, with outlets discharging into streams. Consult. Engr., Samuel M. Gray, Providence, R. I.; Clk., G. C. Dunham.

SOUTH NORWALK, CONN.—Jos. R. Taylor, Cy. Clk., writes us that the city will construct a 24-in. overflow storm water sewer to relieve the sewers in the lower portion of the city; estimated cost, $500.

COHOES, N. Y.—Prof. Palmer C. Ricketts, Troy, N. Y., engaged by the public improvement commission to judge the plans received for the system of sewerage, has recommended to the commission the plan signed I. X. L. By this plan most of the present sewers can be used. Those in the central part of the city run into a main along the Mohawk River and across that stream diagonally from the foot of Cedar St. to Bridge Ave., then along the east bank of the Mohawk to an outlet at the end of Locust Ave. in the future, if necessary, the city could build the sewer to an outlet at the south end of Adams Island. The sewers in the southern part of the city would empty into a main in Eagle's Nest ravine and empty at the foot of the ravine. The plan would also drain the north end of the island into the Mohawk River at a point above Buttermilk Falls, and the southern part into the ship St. sewer. This would use some of the old sewers, including the ravine sewer. In this plan there are ten miles of new sewers in the separate system, one mile of new sewers in the combined and 5.4 miles of old sewers. Estimated cost, $127,792.

HUDSON, N. Y.—Bids are asked until Aug. 25 for constructing a 10-in. pipe sewer in Columbia St. W. S. Hallenbeck, Cy. Clk.

LANCASTER, N. Y.—This place voted against appropriating $1,200 for plans for the proposed system.

LITTLE FALLS, N. Y.—S. E. Babcock, Cy. Engr., writes us that surveys have been ordered for sewers on the south side of the Mohawk River and Erie Canal. Work cannot begin until canal navigation is closed. There will be required about three miles of 24 to 8-in. pipe sewer in rock.

LONG ISLAND CITY, N. Y.—James H. Johnson, Engr., Sewer Dept., Queens Borough, is preparing plans, etc. for relaying about 3,320 ft. of 24-in. pipe sewer in Jamaica. It is probable that bids will be asked in a few days. Other sewer work is also proposed.

NEW YORK, N. Y.—Bids are asked until Aug. 24 for repairing the wooden box sewer at 42d St., Norun River. M. F. Donohue, Acting Comr. of Sewers, 205 Broadway.

SCHENECTADY, N. Y.—Bids are asked until Aug. 22 for constructing about 7,100 ft. of 10 and 8-in. pipe sewers. John Allen, Chn. Com.

SYRACUSE, N. Y.—The council is arranging for the construction of a $50,000 trunk sewer in Midland Ave., to drain the southern portion of the city.

WESTFIELD, N. Y.—The question of building a system will be delayed until next year. Samuel C. Crandall, Pres. Village.

JERSEY CITY, N. J.—Bids are asked until Aug. 24 for constructing 310 ft. of 36-in. brick oval sewer and 1,050 ft. of 18-in. pipe sewer, etc. Geo. T. Bouton, Clk. Bd.

KEARNEY, N. J.—Bids are asked until Aug. 23 for building pipe sewers in one street, and also until Sept. 13 for building 5,200 ft. of brick trunk sewer in this city, as described in our advertising columns. W. S. Logan, Township Surv., Arlington, N. J.; Wm. J. Gorsuch, Chn.; J. F. Keily, Clk.——Plans are being prepared for the sewering of a portion of the northeasterly section of the township.

STOCKTON, N. J.—The council has been petitioned to build sewers. Town Surveyor Thomson and City Clerk Abbott may be addressed.

TRENTON, N. J.—The council has voted to build sewers in certain streets. C. Edward Murray, Cy. Clk.

WOODBRIDGE, N. J.—The question of building a system is being considered, according to reports.

CARNEGIE, PA.—Bids are asked until 12 m., Aug. 18, for constructing 1,000 ft. of 5-ft. brick storm sewer. R. J. Hardy, Clk.

CRAFTON, PA.—Bids are asked until Aug. 23 for constructing about 476 ft. of 8-in. pipe sewer, etc., and for the purchase of $19,500 of 4% bonds for sewers, etc. Engr., F. A. McDonald, Penn Bldg., Pittsburg, Pa.; Clk., R. H. Thomson.

NEW KENSINGTON, PA.—Bids are asked until Aug. 22 for constructing about 13,000 ft. of 24 to 6-in. pipe sewers. Address the borough engineer, at 78 Fidelity Bldg., Pittsburg, or J. C. Reed, Chn. Com.; W. D. Snyder, Secy.

PITTSBURG, PA.—The question of building brick and pipe sewers in certain districts of the city is being considered. Wm. R. Brown, Cy. Engr.; S. T. Paisley, Supt. Dept. Highways and Sewers.

PITTSTON, PA.—J. C. Farren & Co., Wilkes-Barre, Pa., have been awarded the contract, at $3,423, for building a sewer in Broad St.

READING, PA.—Bids are asked until Aug. 18 for constructing a storm sewer in 12th St. S. S. Hoff, Cy. Engr.

SLATINGTON, PA.—The council has rejected the bids recently received for building about 1,000 ft. of 30 and 24-in. pipe sewer, and will now do the work itself at a cost of about $2,000.

SOMERSET, PA.—The question of issuing $25,000 in bonds for a system is being considered.

WILKINSBURG, PA.—Bids are asked until Aug. 22 for constructing a 24-in. pipe sewer, culverts, etc. Frease & Spearling, Borough Engrs.

WASHINGTON, D. C.—The district commissioners have authorized the following work: Construct sewer in O St., N. W., between 35th and 36th Sts.; in 36th St., between O and P, and in P between 35th and 36th; estimated cost, $3,400. On Meridian St., between Huron St. and Columbia Road; estimated cost, $2,900.

ATLANTA, GA.—The county commissioners have asked the city to co-operate with the county in the building of new sewers.

LEXINGTON, KY.—Bids will soon be asked by the city clerk and mayor for building 1,800 ft. of 27-in. pipe sewer in East Main St., at the C. & O. R. R. crossing.

CINCINNATI, O.—Bids are asked until Aug. 25 for constructing sewers in Follett St. Geo. H. Spellmire, Clk. Bd. City Affairs.

HAMILTON, O.—Reuben R. Marble, Columbus, O., is reported to have been engaged to report on the best plan for sewers in the Market St. district.

NAPOLEON, O.—James P. Rago, Mayor, writes us that plans for a system are being prepared by Riggs & Sherman, The Nasby, Toledo, O.

NILES, O.—The question of new sewers is being considered, according to reports.

SANDUSKY, O.—It is proposed to build sewers in certain streets. A. W. Miller, Cy. Clk.

TOLEDO, O.—Bids are asked until Aug. 29 for constructing 15-in. pipe and 24-in. brick sewers in certain streets. L. P. Harris, Cy. Clk.

WELLSVILLE, O.—An election will soon be held to vote on the question of building a system to cost about $75,000. Mayor Dennis and Clerk Wells may be addressed.

YOUNGSTOWN, O.—The board of health has voted to urge the council to take steps towards improving the system.——Dr. W. L. Buechner, of the board of health, has recommended that an engineer be engaged to plan a complete reconstruction of the system.

FORT WAYNE, IND.—It is probable that a sewer will soon be built in South Wayne, a suburb about to be annexed to this city.

INDIANAPOLIS, IND.—Bids are asked until Aug. 22 for constructing sewers in several streets. M. A. Downing, Pres. Bd. Pub. Wks.

KOKOMO, IND.—A. W. Smith, Cy. Engr., informs us that the council has passed a resolution to construct a 4-ft. brick sewer about 3,500 ft. long. The ordinance will be introduced Sept. 12.

OWOSSO, MICH.—Riggs & Sherman, The Nasby, Toledo, O., have been engaged to superintend the construction of the system.

CHICAGO, ILL.—The board of local improvements proposes to build a sewer in the 95th St. district to drain about 10,800 acres; estimated cost, $1,500,000, and also for improving the pavement on Archer Ave. for three miles at a cost of about $500,000.

KEWANEE, ILL.—Bids are asked until Aug. 23 for constructing sewage disposal tanks. Jno. H. Pierce, Pres. Bd. Local improvements. The contract for building the system has been let to Munn & Eagan, Nebraska City, Neb., at $24,804.

MONTICELLO, ILL.—The board of local improvements has voted to build a sewer in North State St. Councilman H. D. Peters and J. A. Bender may be addressed.

MURPHYSBORO, ILL.—Bids are asked until Aug. 19 for laying sewer pipe in certain streets. J. L. Ashman, Cy. Clk.

VENICE, ILL.—It is stated that the village authorities have employed two engineers to make surveys for the proposed chain of sewers, connecting Granite City, Newport, Madison and Venice, and it is estimated that the cost of building the sewers will be about $30,000.

COUNCIL BLUFFS, IA.—Bids are asked until Aug. 22 for constructing a storm sewer. N. C. Phillips, Cy. Clk.

WHITE EARTH, MINN.—It is stated that plans for sewers and water-works at the White Earth Indian school have been completed, and will be submitted to the secretary of the interior, Washington, D. C., for approval this week.

LAWRENCE, KAN.—Bids are asked until Aug. 22 for constructing lateral sewers and for curbing. A. G. Honnold, Cy. Clk.

KANSAS CITY, MO.—Bids are asked until Aug. 22 for constructing a pipe sewer in district No. 11; check, $200. ——The board of public works has approved plans for the Vine St. sewer, to cost about $5,000.——Plans for the Westport sewerage system will be completed about Oct. 1. Henry A. Wise, Cy. Engr.

JOPLIN, MO.—An election will be held Aug. 23 to vote on the question of issuing $30,000 in bonds for extending the system.

ST. JOSEPH, MO.—The council has voted to extend the Blacksnake sewer. P. J. Kirschner, Mayor.

SHERMAN, TEX.—C. P. Gregory, Chn. Com., writes us that the council has done nothing as yet in regard to the proposed sewers. It is waiting to hear from eastern contractors.

DENVER, COLO.—Plans are reported as being prepared by H. C. Lowrie, Engr. Bd. Pub. Wks., for a storm sewer to drain 2,000 acres.

PUEBLO, COLO.—Bids will probably soon be asked by the council for building a system for Ward No. 8, Bessemer. Plans prepared by City Engineer E. W. Hathaway have been accepted. The next council meeting will be held Aug. 29. Mayor Orman may be addressed.

BILLINGS, MONT.—Bids are asked by the city clerk until Sept. 6 for furnishing the material and for constructing a system, plans for which were prepared some years ago by Geo. K. Reider, Helena, Mont. Population, 12,000.

NEVADA CITY, CAL.—The trustees will soon take steps to provide the city with a system; estimated cost from $30,000 to $40,000.

POMONA, CAL.—C. P. Patterson, Pres. Bd. Trustees, writes us that an initial movement is being made for the proposed system.

SAN LUIS OBISPO, CAL.—William Shipsey, Chn. Bd. of Trustees, informs us that the city engineer has prepared plans for a system; estimated cost, $36,000. An election will be held Sept. 5 to vote on the question of issuing bonds.

PHOENIX, ARIZ.—We are informed that it is proposed to build a separate system. On account of the level country, the system will require pumping and sewage disposal works. Des. Engr., Ernest A. Hagen, Hotel Adams, Phoenix, and Byrne Bldg., Los Angeles, Cal.

STRATFORD, ONT.—W. F. Van Buskirk, Cy. Engr., has submitted a report on sewage purification, in which he recommends the adoption of a system of filtration. He estimates the cost as follows: Two tanks (90 × 30 ft.), with necessary valves, screens and discharge pipes, $7,400; sludge well, $600; seven filters (100 × 60 ft.), with pipes, valves, etc., $9,860; outlet pipe from beds, $1,215; incidentals and engineering, $1,907.

TORONTO, ONT.—The residents of Parkdale are considering the question of a sewage disposal plant, to cost about $30,000. A committee has been appointed to visit certain cities in Massachusetts to investigate methods of sewage disposal. Alderman J. J. Graham, F. W. Monteith and Mr. Saunders, of the board of works, may be addressed.

## GARBAGE DISPOSAL—STREET CLEANING

NEW YORK, N. Y.—Bids are asked until Aug. 26 for the unloading of deck scows of the department at Riker's Island. Jas. McCartney, Comr. St. Cleaning, 346 Broadway.

ROCHESTER, N. Y.—Local papers state that the board of health will soon have to consider the question again of garbage disposal.

UTICA, N. Y.—The council has passed over the mayor's veto the ordinance awarding the garbage disposal contract to Henry Staffenbach, at $6,500 a year, for 10 years.

ATLANTIC CITY, N. J.—Sylvester Leeds has been awarded the contract for collecting and removing the garbage for the next five months at $4,400. The contract for removing garbage from the city wharf in scows until Jan. 1 was awarded Aug. 8 to Wallace Smith at 50 cts. per ton of 2,240 lbs.

ERIE, PA.—F. Hanlon, Cy. Clk., writes us that the city has under consideration the question of the disposal of garbage, and action has been taken to make an appropriation of $10,000 for the erection of a crematory.

WILMINGTON, DEL.—The contract for removing ashes for the year from Sept. 1 has been let to Jos. B. Stidham at $7,200.

FORT THOMAS, KY.—Major Hall, commanding, at Fort Thomas, has recommended to the war department that a crematory be built.

MILWAUKEE, WIS.—The commissioners of public works received the following bids Aug. 12 for furnishing and installing a garbage disposal plant: Engle Sanitary & Crematory Co., $52,500 and $63,500; F. C. Gross and Joseph Schaaf, $58,500; F. H. Kratzer, $53,700; Dixon Garbage Crematory Co., $58,000; Gorman Bros., $61,000; Jacob Jacobi (no bond), $79,019. Local papers state as follows: The bid of F. C. Gross and Joseph Schaaf is to sell the Wisconsin Rendering Co.'s plant at Mequon, which, it is said, can reduce 100 tons of garbage a day by the Merz system, at a cost not to exceed 22 cts. a ton. This was accompanied by an offer to enter into a contract with the city for the disposal of garbage, delivered at the plant, for $14,500 a year, or delivered on board boat or cars in the city for $22,000 a year. As the specifications call for the erection of a plant on Jones Island, it is not likely that this bid will be considered. The Engle Sanitary & Crematory Co., of Des Moines, Ia., guarantees that the cost of disposing of garbage will not exceed 32½ cts. a ton, that not over 200 lbs. of coal for each ton of garbage cremated will be used, and that it will require not more than six men to operate the plant. For $9,000 additional the company offers to furnish power for the pumping station. The bid of F. H. Kratzer, 140 Reed St., is to dispose of garbage by the Pattitz system. It sets forth that one ton of coal will be required to dispose of 10 tons of garbage, and that five employees can operate the plant. Gorman Bros., Toledo, O., propose to put in the Smead system. They say a force of nine men will be required and 300 lbs. of coal to a ton of garbage. The Dixon company, Toledo, guarantees that not more than 240 lbs. of coal will be used in the cremation of a ton of garbage, and that 16 men will be sufficient.

## STREETS AND ROADS.

PORTLAND, ME.—Bids are asked until Aug. 19 for furnishing about 2,500 sq. yds. of granite paving blocks. Geo. N. Fernald, Comr. Pub. Wks.

LUNENBURG, MASS.—Bids are asked until 12 m., Aug. 18, for building 2,300 lin. ft. of state highway. T. C. Mendenhall, Chn. Massachusetts Highway Comn., Boston.

REVERE, MASS.—Bids are asked until Aug. 22 for 9,000 cu. yds. of grading, 16,000 cu. yds. of filling, 750 lin. ft. of drain, 2,600 sq. yds. of broken stone, etc., in Revere parkway. Edwin B. Haskell, Park Comr.; Wm. T. Pierce, Engr.

WILLIAMSTOWN, MASS.—Bids are asked until 12 m., Aug. 18, for constructing 3,800 lin. ft. of highway. T. C. Mendenhall, Chn. Massachusetts Highway Comn., Boston.

SOUTH NORWALK, CONN.—Jas. R. Taylor, Cy. Clk., informs us that a contract has been awarded to W. R. Johnson, at $10,000, for brick paving on South Main St.

BUFFALO, N. Y.—The board of supervisors has voted in favor of macadamizing the White Corners Road at a cost of $36,400.

GLENS FALLS, N. Y.—Bids are asked until Sept. 5 for furnishing the material and for constructing a brick pavement, as stated in our advertising columns. G. P. Slade, Cy. Engr.; W. M. Cameron, Clk.

LANSINGBURG, N. Y.—Bids are asked until Aug. 22 for about 50,854 sq. yds. of macadam pavement and 22,840 lin. ft. of curbing. Chas. A. Roemer, Village Engr.; F. M. Miter, Clk.

LE ROY, N. Y.—The board of trustees has decided to purchase a new stone crusher, according to reports.

SCHENECTADY, N. Y.—Ordinances have come before the council for brick paving in three streets and macadamizing in North St.; also a petition for grading, curbing, etc., in Hamilton St. Louis R. Sebring, Cy. Engr.

HASBROUCK HEIGHTS, N. J.—Bids are asked until Sept. 6 for the purchase of about $13,500 of 4% paving bonds, etc. G. H. Ramsden, Borough Clk.

JERSEY CITY, N. J.—Bids are asked until Aug. 24 for about 1,000 cu. yds. of excavation, 4,400 sq. yds. of macadam, 2,175 lin. ft. of curb, etc., on Pearsall Ave. Geo. T. Bouton, Clk. St. Comrs.

KEARNEY, N. J.—Contracts have been awarded for the improvement of two streets. Wm. J. Gorsuch, Chn., Arlington. Wm. S. Logan, Township Surv., 160 Midland Ave., Arlington, N. J.

NEWARK, N. J.—Bids are asked until Aug. 25 for paving and repaving in portions of Fulton St. and six other streets with 40,000 sq. yds. of sheet asphalt. M. F. McLaughlin, Gen. Supt. St. and Water Comrs.

PATERSON, N. J.—Bids are asked until 8 p. m., Aug. 19, for grading and macadamizing portions of 17 roads. Wilson M. Lawson, Chn. Com.; Geo. U. Botbyl, Clk. Bd. Freeholders.

RAHWAY, N. J.—The council will have Seminary St. macadamized at a cost of about $2,000.

VINELAND, N. J.—Bids are asked by the council for paving Landis Ave., according to reports.

WOODBURY, N. J.—Geo. S. Pierson, of the committee, informs us that the board of freeholders at a meeting held July 21 received a petition for macadamizing about three-fourths of a mile in Broad St. Wm. M. Carter has been appointed to prepare plans, etc.

CARBONDALE, PA.—Bids are asked until Aug. 24 for 6,480 sq. yds. of brick paving, as stated in our advertising columns. F. B. Clifford, Cy. Clk.

MILTON, PA.—An ordinance has been passed to pave Broadway and Front St. with brick. W. K. Wertman, Pres.; Wm. C. Miller, Clk.

EASTON, PA.—C. H. Lutzens & Sons have submitted the lowest bid for macadamizing in nine streets, at $47,932.

NEW KENSINGTON, PA.—Bids are asked until Aug. 22 for paving and curbing portions of Fifth Ave. J. C. Reed, Chn. Com.; W. D. Snyder, Secy.

PHILADELPHIA, PA.—Bids are asked until Aug. 23 for repaving certain alleys with brick. Benj. Lee, Health Officer, City Hall.

READING, PA.—Bids are asked until 3 p. m., Aug. 18, for 13,000 lin. ft. of curbing and 41,500 sq. yds. of asphalt paving. S. S. Hoff, Cy. Engr.; H. H. Hammer, Clk.

WASHINGTON, PA.—Bids are asked until Aug. 22 for grading and brick paving. J. N. White, Secy.

BALTIMORE, MD.—W. E. Reilley, Chester, Pa., has been awarded a contract for furnishing the Standard Lime & Stone Co. with 100 car loads of crushed stone for repaving Edgmont Ave.

ROCKVILLE, MD.—W. W. Welsh, County Clk., informs us that the following bids, received Aug. 10, for macadamizing, advertised in Engineering News July 28, have been rejected:

| | |
|---|---|
| Owen Patterson & Co., 1302 John St., Baltimore | $55,500 |
| B. D. Pierce, Jr., Co., Bridgeport, Conn | 52,000 |
| Shea & Gunnell, Lay Hill, Md | 37,700 |

WESTMINSTER, MD.—The council has decided to spend $3,000 for macadamizing in Main St.

WASHINGTON, D. C.—Bids are asked by the district commissioners until Aug. 27 for grading in certain streets, as stated in our advertising columns.

MONTGOMERY, ALA.—The council has awarded a contract to the Coaldale Brick & Tile Co., Birmingham, for furnishing and laying 1,350,000 brick, at a cost of about $25,000.

CARTHAGE, O.—Bids are asked until Sept. 6 for the improvement of the Hamilton pike road. E. F. Layman, Village Engr.; L. Hall, Clk.

CINCINNATI, O.—Bids are asked until Aug. 29 for macadamizing and improving Red Bank Ave. R. P. Butterfield, Clk. Bd. Cy. Affairs.

CLEVELAND, O.—Bids are asked until Aug. 31 for seven-eighths of a mile of grading and paving, on the Ridge Road. Julius C. Dorn, Clk. County Comrs.——Bids are asked until Sept. 7 for grading, draining and brick paving in East Madison Ave. Geo. R. Warden, Dir. Pub. Wks.

FREMONT, O.—Bids are asked until Sept. 5 for brick paving, etc. R. J. Christy, Chn. Com.

LIMA, O.—Bids are asked until Aug. 19 for macadamizing in Shugar Alley. C. E. Lynch, Cy. Clk.

MANSFIELD, O.—Bids are asked until Sept. 10 for improving portions of Lexington Ave., East Johns St., Marion Ave. and West Ave. F. M. Remy, Cy. Clk.

SPRINGFIELD, O.—Resolutions have been passed to grade and gravel portions of ten streets. W. F. Bauer, Pres.; Philip Huonker, Cy. Clk.

TOLEDO, O.—Bids are asked until Sept. 12 for furnishing the material and for paving portions of Knower and Rockingham Sts. with Buckeye blocks, etc. L. P. Harris, Cy. Clk.

WARREN, O.—Bids are asked until Aug. 23 for about 1,100 sq. yds. of brick paving. E. P. Dickey, Cy. Engr.

YOUNGSTOWN, O.—F. M. Lillie, Cy. Engr., informs us that bids will be asked about the middle of September for about 7,800 sq. yds. of sheet asphalt or block pavement, on Scott St.; estimated cost, $20,000.

SHOALS, IND.—Bids are asked until Sept. 8 for constructing eight sections of macadam roads. Horation Harrymann, County Audr.

COLUMBUS, IND.—Bids are asked until Aug. 19 for constructing 6½ miles of gravel roads. H. C. Harris, Chn. County Comrs.

INDIANAPOLIS, IND.—Bids are asked until Aug. 22 for brick paving, etc., in portions of Pawnee, Arizona and Sterling Sts. M. A. Downing, Chn. Bd. Pub. Wks.

KOKOMO, IND.—A. W. Smith, Cy. Engr., informs us that 12,000 sq. yds. of brick paving will be laid. Bids will be asked later.

RICHMOND, IND.—Bids are asked until Sept. 2 for constructing a brick walk, stone curbing, etc., in Main St. Jas. H. Winder, Clk.

DETROIT, MICH.—The board of public works is considering the question of paving Second Ave. with asphalt, at a cost of about $40,000.

CHICAGO, ILL.—Bids are asked until Aug. 24 for building a slag roadway 8 ft. wide, from 114th St. to Hegewisch. L. E. McGann, Comr. Pub. Wks.

MATTOON, ILL.—Bids are asked until Aug. 30 for 10,522 sq. yds. of brick paving, 4,098 lin. ft. of curbing, catchbasins, etc. A. C. Loomis, Cy. Engr.; Jno. F. Scott, Pres.

MOUND CITY, ILL.—Bids are asked until Aug. 24 for repairing the Mound City national cemetery roadway. Maj. T. E. True, Depot Q. M., Washington, D. C.

QUINCY, ILL.—Bids are asked until Aug. 20 for paving five alleys. Address Secretary Heckle, Bd. Local Improvements.

DES MOINES, IA.—Bids are asked by the board of public works until Aug. 22 for about 15,000 sq. yds. of brick paving and curbing.

MINNEAPOLIS, MINN.—A portion of University Ave. will be paved with brick. Address Alderman Lane.

ST. PAUL, MINN.—Bids are asked until Sept. 5 for constructing a macadam road on Rice St., etc. D. M. Sullivan, County Audr.

MILWAUKEE, WIS.—The commissioners of public works have advertised for bids for the laying of asphalt pavement on several streets in the 18th Ward. The work must be completed within 30 days after the contracts are awarded.

OMAHA, NEB.—Bids are asked until Aug. 31 for about 35,000 cu. yds. of grading. D. M. Haverly, County Clk.

KANSAS CITY, MO.—Bids are asked by the park board until Aug. 24 for macadamizing the Paseo drives.

KANSAS CITY, MO.—Bids are asked until Aug. 22 for constructing stone sidewalks and paving a number of streets with brick. H. A. Wise, Cy. Engr.

MARSHALL, MO.—Bids are asked until Aug. 29 for 24,300 sq. yds. of macadam paving, 18,000 lin. ft. of curbing, etc. A. R. James, Cy. Clk.

TACOMA, WASH.—Reports state that the county commissioners have ordered surveys to be made for a wagon road, about 22 miles long.

LOS ANGELES, CAL.—Bids are asked until Aug. 20 for grading the Santa Monica and Malibu Coast Road. T. E. Newlin, County Clk.

OAKLAND, CAL.—Bids are asked until Aug. 22 for macadamizing in 20th St. and East 18th St. J. W. Tompkins, Cy. Clk.

OWEN SOUND, ONT.—Reports state that an election will be held Aug. 25 to vote on the question of borrowing $10,000 for macadamizing, and for the purchase of a steam road roller.

## MANUFACTURING PLANTS.

AUBURN, ME.—E. O. Wells & Co., of Auburn, have been awarded the contract to build a 4-story factory, 136 × 80 ft., for the Turner Center Dairying Association.

BOSTON, MASS.—The New England Sanitary Product Co. is erecting at Old Harbor Point, near Boston, an absolutely fire-proof 2-story building, 120 × 130 ft., with skeleton steel framework, consisting of steel columns built in the walls, carrying heavy steel floor beams and girders and clear span roof trusses which support the roof. The structural steel work in this plant was designed and is being furnished and erected by the Berlin Iron Bridge Co., of East Berlin, Conn.

BRIDGEPORT, CONN.—It is reported that the Union Metallic Cartridge Co. will build an extension to its factory, at a cost of $50,000.

DOLGEVILLE, N. Y.—It is reported that Armour & Co. have decided to enlarge the felt works at this place, which have recently been bought by them.

NEW BRIGHTON (S. I.), N. Y.—The Kings Patent Plaster Mills, at New Brighton, Richmond Borough, was burned Aug. 6, causing damage estimated at $100,000.

DUBOIS, PA.—The contract for rebuilding the J. Mahler glass warks, which were destroyed by fire on June 25, has been awarded to a Pittsburg firm, according to reports.

EATON, PA.—Bids are asked by the Seitz Brewing Co. until Aug. 30 for erecting a new brewery on Bushkill St. Pres., John A. Seitz.

LANCASTER, PA.—It is reported that the Lancaster Board of Trade has offered a site of 14½ acres, and the necessary bricks for the building of a large steel plant, which Charles James, of Tacony, Pa., formerly connected with Disston Sons' steel plant, at Tacony, and a number of Philadelphia and New York capitalists propose locating here. It will be called the Lancaster Steel Co., and is to have a capital of $400,000, of which sum the people of Lancaster are asked to subscribe $100,000.

EDENTON, N. C.—The Edenton Cotton Mfg. Co., of Edenton, was incorporated with a paid-up capital stock of $80,000 Aug. 15, by C. S. Vann, W. D. Pruden, F. A. White, C. T. Falk and others. The company expect to build and equip at once a spinning and cotton mill at Edenton. No contracts have been let.

SKYCO, N. C.—The Consolidated Ice Co. was incorporated in this state Aug. 15 with a paid-up capital of $5,400, to establish and operate an ice plant at Skyco. The incorporators are W. S. C. Pugh, R. C. Evans, E. R. Daniels, and W. P. Lemon.

CINCINNATI, O.—Reports state that the Lodge & Shipley Tool Co. will soon erect a new plant on Colerain Ave., near Elam St., to be 300 × 100 ft., and to cost about $50,000. Pres., William Lodge.

NORWALK, O.—The plant of the Sprague Umbrella Co. was burned Aug. 9, causing a loss of about $75,000; insurance, $52,500. The building was a 2-story frame structure, 42 × 150 ft., with a wing 32 × 100 ft.

PAINESVILLE, O.—The plant of the Robison Basket Co. was destroyed by fire Aug. 7, causing a reported loss of $100,000; insurance, $55,000.

CHICAGO, ILL.—A fire in this city Aug. 12 damaged the factory of the American Cutlery Co., at 173 to 193 Mather St., causing a reported loss of $75,000.

PUEBLO, COLO.—A fire in this city damaged the plant of the Central Ore Sampling Works; estimated loss, $25,000.

FLAGSTAFF, ARIZ.—The sawmill and box factory of the Arizona Lumber & Timber Co. were destroyed by fire Aug. 2, causing a loss of about $75,000; insurance, $35,000.

MONTREAL, QUE.—The rolling mill, nail mill and lock mill of Peck, Benny & Co. were burned Aug. 3, causing a reported loss of $100,000; fully insured.

## GAS PLANTS.

TORRINGTON, CONN.—It is reported that the Torrington Electric Light Co. is considering the question of installing a gas plant, and will increase the capital stock from $24,000 to $100,000.

WILLIAMSPORT, PA.—Reports state that the Williamsport Gas Co. is considering the question of extending its plant. Address Jay W. Lane.

BOONE, IA.—It has been voted to allow a company to construct a gas plant.

LITTLE ROCK, ARK.—Plans have been completed for the extension of mains through North Little Rock, according to reports. Address Manager Pullen.

SAN BERNARDINO, CAL.—The county supervisors want estimates for installing a plant to furnish gas for the court house and jail, to cost about $1,000.

## MISCELLANEOUS CONTRACTS.

ENGINEER.—Berlin, Ont.—The clerk is advertising for a town engineer.

RETAINING WALL.—Troy, N. Y.—Bids are asked until 11 a. m., Aug. 19, for constructing a retaining wall on Harrison Place. E. Ogden Ross, Secy.

FIRE ENGINES.—Racine, Wis.—Reports state that the city has decided to purchase steam fire engines.

BONDS.—Los Angeles, Cal.—Bids are asked until Sept. 19 for the purchase of about $300,000 of 4% city bonds. C. H. Hance, Cy. Clk.

BONDS.—St. Paul, Minn.—Bids are asked until Aug. 20 for the purchase of $50,000 of 10-year 3½% county bonds. D. M. Sullivan, County Audr.

BONDS.—Taunton, Mass.—Bids are asked until 12 m. Aug. 18 for the purchase of $70,000 of 4% bonds. Edward Mott, Chn. County Comrs.

DRY DOCK.—West Superior, Wis.—It is reported that the American Steel Barge Co. is arranging for the construction of a new dry dock.

GUN FORGINGS.—Washington, D. C.—Bids are asked until Aug. 24 for furnishing 4-in. and 14-lb. gun forgings. J. D. Long, Secy. Navy Dept.

TELEPHONE SYSTEM.—Neepawa, Man.—Reports state that an election will be held to vote on the question of appropriating $6,000 for a telephone system.

BONDS.—New Orleans, La.—Bids are asked until Aug. 25 for the purchase of $325,000 of 5% levee bonds. T. J. Duggan, Secy. Bd. Levee Comrs., Masonic Temple.

TELEPHONE LINE.—Rockwood, Mich.—Reports state that the People's Telephone Co., of Wayne and Monroe counties, will extend its line to Monroe, via Scofield and Maybee.

REPAIRING STEAMER.—Washington, D. C.—Bids are asked until Aug. 23 for repairing the hull and machinery of the revenue cutter "Forward." O. L. Spaulding, Asst. Secy., Treasury Dept.

FIRE HOSE.—St. Louis, Mo.—Bids are asked until 12 m., Aug. 19, for furnishing 3,250 ft. of 2½-in. rubber-lined cotton hose, 2,000 ft. of 2½-in. 5-ply rubber hose, etc. Jas. Richardson, Comr. of Supplies.

SEA WALLS.—Baltimore, Md.—Bids are asked until Sept. 9 for constructing sea walls, etc., at North and Hawkins Points, as stated in our advertising columns. Lieut. Chas. W. Kutz, U. S. Engr., 9 Pleasant St.

SUPPLIES.—New York, N. Y.—Bids are asked until Aug. 22 for furnishing oils, plumbing material, tools, iron fittings, belting and packing, etc. Adolph Simis, Jr., Comr. Dept. Pub. Charities, East 26th St.

TELEPHONE SYSTEM.—Springboro, Pa.—A franchise has been granted to the Conneautville Telephone & Light Co. to construct and operate a telephone system throughout the borough of Spring. A. R. Seeley, Burgess.

BONDS.—Los Angeles, Cal.—The council has passed an ordinance to issue $160,000 in bonds for the construction of certain tunnels, and $10,000 in bonds for the purchase and improvement of certain lands. C. H. Hance, Cy. Clk.

TRAVELING CRANES.—Chicago, Ill.—Bids are asked until Aug. 30 for furnishing plans, etc., and for erecting electric traveling cranes for the new water pumping stations, as stated in our advertising columns. L. E. McGann, Comr.

LEVEE WORK.—Brownsville, Tenn.—Messrs. J. N. E. Moore, W. Halliburton, J. Anthony and W. W. Dupree have been appointed a committee to prepare specifications and to award contracts for the proposed levee work along the Hatchie River.

CYLINDER PLATES.—Tompkinsville (S. I.), N. Y.—Bids are asked until Aug. 24 for furnishing seventh-course cylinder plates for the Plum Beach Light-House, R. I., as stated in our advertising columns. Lieut.-Col. D. P. Heap, U. S. Engr., Tompkinsville.

DOCKS AND SLIPS.—Seattle, Wash.—Local papers state that Jas. J. Hill, Pres., Great Northern Ry. Co., is in the city in regard to the construction of docks and slips and a grain warehouse, between Harrison and Newark Sts. F. H. Britton, Asst. Gen. Supt., Spokane.

STEEL COAL SHEDS, ETC.—Pago Pago, Samoa.—Plans are being prepared at the bureaus of yards and docks, navy department, Washington, D. C., for the construction of steel coal sheds and piers, at this place, to cost about $250,000. Bids for the work have been asked, according to reports.

LEVEE WORK.—Vincennes, Ind.—The county commissioners have granted a petition by Chas. Pinkstaff, for an appropriation of $30,000 for strengthening about 18 miles of the Wabash levee, which will require about 183,381 cu. yds. of material. Bonds will be issued.

DREDGING.—Norfolk, Va.—A contract has been awarded to the American Dredging Co., Philadelphia, Pa., for dredging a channel 28 ft. deep and 450 ft. wide, in the Elizabeth River, from Hampton Roads to the Norfolk Navy Yard, to cost about $360,000. Capt. Thos. L. Casey, U. S. Engr.

LEVEE WORK.—West Memphis, Ark.—The bids received Aug. 3 by the St. Francis Levee Board, for constructing about 24 miles of levee, containing about 2,193 cu. yds. of material, have been rejected on account of being too high. Harry N. Pharr, Ch. Engr., informs us that new bids will not be asked this season. John B. Driver, Pres. Bd., West Memphis.

MINING MACHINERY.—Pittsburg, Pa.—Local papers state that Messrs. K. T. Fukius, T. Dan, T. Matsubarba and T. Maketa, Mining Engrs. and owners of numerous coal mines in Southern Japan, are in Pittsburg to purchase mining and pumping machinery and the material to sink a shaft over 2,000 ft. deep.

SHIP CANAL.—Chicago, Ill.—Press reports state that surveys for a ship canal through the Calumet to connect with Wolf Lake and Lake George, are now being made, and a contract will be let about Oct. 1 for the employment of about 2,000 men. A. F. Knotts, Secy. Wolf Lake Harbor Com., is said to be interested.

## CONTRACT PRICES.

BY-PASS.—Chicago, Ill.—The drainage trustees received the following bids June 29 for constructing a by-pass for Section 18 of the drainage channel, as advertised in Engineering News; projects 2 and 3:

Bids Received at Chicago, Ill., June 29, 1898, for Construction of a By-Pass.

| Bidder. | Project No. 2. Construction of wall, 1,810 cu. yds. | Pine stringers, 8,550 ft. B.M. | Oak floor-ing, 22,500 ft. B.M. | Beams, bed plates, etc., 9,450 lbs. | Excavation, 5,100 cu. yds. | Total. | Project No. 3. Construction of wall, and gate,* 400 cu. yds. | Cast-iron pipe and water 15 cu. yds. | Excavation, cu. yds. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|
| Griffiths & McDermott, Chicago.. | $4.60 | $32.00 | $34.00 | $0.03 | $0.65 | $12,963 | $3.75 | $1,800 | $0.65 | $3,310 |
| Mason, Hoge, King & Co., Chicago | 4.00 | 35.00 | 35.00 | .05 | 1.00 | 13,899 | 3.75 | 2,325 | 1.00 | 3,840 |
| Heldmaier & Neu, Chicago ..... | 5.65 | 20.00 | 28.50 | .035 | .90 | 15,960 | 4.90 | 2,425 | .90 | 4,399 |
| Gahan & Byrne, Chicago ..... | 4.30 | 21.00 | 25.00 | .04 | 1.40 | 16,043 | 4.05 | 3,250 | 1.40 | 4,801 |
| Geo. M. Campbell & Co., Joliet... | 6.00 | 22.00 | 23.00 | .025 | .90 | 16,392 | 3.50 | 2,100 | .90 | 3,514 |

*Lump sum for furnishing and placing.

PIER.—Philadelphia, Pa.—It is reported that contractor Chas. McCaul wants estimates for the construction of a wooden pier 150 ft. wide, for the Philadelphia & Reading Ry.

DAM.—Chicago, Ill.—The following bids were received by the trustees of the sanitary district June 29 for furnishing the materials and for constructing a concrete dam, Section 18, main channel, as advertised in Engineering News:

Bids Received at Chicago, Ill., June 29, 1898, for Furnishing Material and Construction of Concrete Dam.

| Quantities. | | Gahan & Byrne, Chicago. | Griffiths & McDermott, Chicago. | Geo. M. Campbell & Co., Joliet. | Mason, Hoge, King & Co., Chicago. | Heldmaier & Neu, Chicago. |
|---|---|---|---|---|---|---|
| Excavation and disposition of material.. | 175,500 cu. yds. | $0.452 | $0.57 | $0.65 | $0.68 | $0.675 |
| | 7,670 " " | .58 | 1.00 | .50 | .75 | 1.10 |
| | 55,400 " " | .22 | .25 | .25 | .20 | .33 |
| Removal of dams Nos. 1 and 2, and Adams dam, lump sum | | 4,000.00 | 3,500.00 | 1,500.00 | 6,766.00 | 5,300.00 |
| Construction of new dam above—59.0, lump sum ..... | | 17,751.00 | 12,000.00 | 11,425.00 | 12,225.00 | 14,193 00 |
| Construction of new dam below—59 0..... | 150 cu. yds. | 1.50 | 7.00 | 6.00 | 5.75 | 7.80 |
| Excavation and disposition of material.... | 2,000 " " | .36 | .85 | .75 | .75 | .80 |
| Construction of retaining walls..... | 6,300 " " | 4.05 | 3.75 | 3.50 | 3.75 | 4.90 |
| Excav. and disposition material lock walls | 50 " " | 1.50 | 7.00 | 1.25 | 3.00 | 5.00 |
| Portland cement, concrete lock walls..... | 250 " " | 6.00 | 7.00 | 6.00 | 7.00 | 10.60 |
| Total ..... | | $145,749 | $165,530 | $170,698 | $183,051 | $200,815 |

FILTRATION PLANT.—Albany, N.Y.—The following bids were received by the water commissioners Aug. 2, 1898, for the water filtration plant, contract No. 7, for the pumping station and intake; Stone & Thurston awarded contract; Supt., Geo. I. Bailey:

| Quantities. | | Stone & Thurston, New York. | C. Hughes, Syracuse, N. Y. |
|---|---|---|---|
| Cast-iron intake, complete | | $3,800.00 | $4,350.00 |
| Pumping station, complete | | 12,167.00 | 12,700.00 |
| Chimney stack, complete | | 1,540.00 | 1,800.00 |
| Sluice gates and screens | | 825.00 | 1,000.00 |
| Shallow excavation | 600 cu. yds. | .30 | .50 |
| Deep excavation | 600 " " | .50 | 1.20 |
| Concrete (1—3—6) | 700 " " | 4.95 | 5.50 |
| Concrete (1—2—4) | 100 " " | 6.00 | 6.50 |
| Paving | 100 sq. yds. | 1.00 | 1.50 |
| Total | | $22,977.00 | $25,520.00 |

LAYING WATER PIPE.—Albany, N. Y.—The water commissioners received the following bids Aug. 2, 1898, for laying water pipe; contract awarded Wm. R. Reynolds; Geo. I. Bailey, Supt.:

| Quantities. | | W. R. Reynolds. | F. Pidgeon. | John Doyle. | Dollard & Holler. | Robt. M. Strong. |
|---|---|---|---|---|---|---|
| Laying water pipe: | | | | | | |
| 4-in. | 85 lin. ft. | $0.23 | $0.40 | $0.25 | $0.25 | $0.23 |
| 6-in. | 3,610 " " | .23 | .27 | .25 | .27 | .23 |
| 8-in. | 820 " " | .41 | .34 | .30 | .31 | .34 |
| 12-in. | 3,900 " " | .38 | .34 | .40 | .41 | .45 |
| Hydrants* | 5 each | 2.63 | 10.00 | 4.00 | 3.00 | 2.87 |
| Valves and boxes, complete: | | | | | | |
| 4-in. | 1 | 3.00 | 6.00 | 2.00 | 2.00 | 1.90 |
| 6-in. | 7 each | 2.12 | 8.00 | 2.00 | 3.00 | 2.75 |
| 8-in. | 1 | 2.50 | 10.00 | 3.00 | 3.00 | 3.00 |
| 12-in. | 3 each | 3.00 | 12.00 | 3.00 | 3.00 | 3.75 |
| House cons | 20 | .75 | 1.50 | 2.00 | .75 | .90 |
| AA I'd pipe | 100 lbs. | .04 | .06 | .05 | .06 | .043 |
| Total | | $2,730 | $2,808 | $2,823 | $2,820 | $2,956 |

*Setting fire hydrants complete.

UNDERGROUND CROSSING.—Kingston, N. Y.—The following bids were received July 9 for constructing an underground crossing for the Colonial City Traction Co., as advertised in Engineering News; contract awarded S. W. Frescoln; Pres., C. M. Preston; Engr. and Supt., C. Gordon Reel; ground will be broken this week:

SLUICE GATES, ETC.—Boston, Mass.—The metropolitan water board received the following bids Aug. 9, 1898, for furnishing sluice gates and an iron floor at the Middlesex Fells reservoir; contract awarded Coffin Valve Co.:

| Quantities. | | Coffin Valve Co., Neponset, Mass. | Camden Iron Wks., Camden, N. J. | I. P. Morris Co., Philadelphia, Pa. |
|---|---|---|---|---|
| 36-in. sluice gates | 8 each | $297.50 | $515.00 | $618.00 |
| 12-in. slice gates | 2 " | 132.00 | 300.00 | 400.00 |
| Steam b'ms & c. i. floor plates | | 776.00 | 1,010.00 | 1,495.00 |
| Total | | $3,420.00 | $5,748.00 | $7,230.00 |

BRICK SEWERS.—Springfield, Mass.—Chas. M. Slocum, Cy. Engr., informs us that the following bids were received Aug. 2 for building brick sewers in Clinton, Fulton and Sargeant Sts.:

EXCAVATION.—Boston, Mass.—The following bids were received by the metropolitan water board Aug. 9, 1898, for excavating, etc., for the easterly portion of north dike, Wachusett reservoir:

| Bidder. | Excavation, 200,000 cu. yds. | Haul of 100 ft., 90,000 cu. yds. | Total. |
|---|---|---|---|
| J. D. Gennaro, Boston (accepted) | $0.14⅞ | $0.09⅝ | $43,812 |
| Auguste Saucier, S. Framingham | .17 | .06¾ | 49,975 |
| Moulton & O'Mahoney, Boston | .18 | .01 | 53,100 |
| H. P. Nawn, Boston | .18 | .01 | 53,100 |
| T. W. Kinser & Sons, Boston | .22 | .09¾ | 64,475 |
| Martin & T. Murphy, Clinton | .22 | .01 | 64,700 |
| Kirk, Driscoll & Co., Syracuse | .23⅝ | .01 | 70,138 |
| Long & Little, Leominster | .25½ | .09½ | 74,400 |
| Newell & Snowling Const'n Co. | .26 | .01 | 76,300 |

Bids Received at Springfield, Mass., Aug. 2, 1898, for Brick Sewers in Clinton, Fulton and Sargeant Sts.

| Bidder. | Masonry.—Brick—Earth excavation, 19,160 cu. yds. | Portl'nd cement mortar, 175 cu. yds. | Conc'te, Am'rican Portl'd cement mortar, 1,342 cu. yds. | 24-in.* outlet pipe and mortar, 135 cu. yds. | 24-in.† outlet specials, 39½ lin. ft. | 8-in. underdrain, 2,950 lin. ft. | Total. | No. of work'g days. |
|---|---|---|---|---|---|---|---|---|
| C. E. Trumbull & Co., Boston, Mass. | $1.25 | $8.50 | $7.05 | $6.50 | $10.00 | $5.00 | $0.20 | $37,639 | 100 |
| F. T. Ley & Co., Springfield, Mass. | .60 | 9.80 | 7.85 | 8.00 | 14.00 | 12.00 | .25 | 29,947 | 45 |
| F. E. Shaw, Providence, R. I. | .80 | 10.00 | 8.00 | 6.50 | 8.00 | 8.00 | .20 | 31,002 | 90 |
| John Walker, New Market, N. H. | .85 | 10.60 | 8.00 | 7.00 | 5.00 | 5.00 | .25 | 31,530 | 50 |
| D. W. Mellen and G. M. Atkin, Springfield | .80 | 10.00 | 8.60 | 6.50 | 16.00 | 11.00 | .20 | 32,649 | 100 |
| Geo. N. Vaughan, Springfield, Mass. | .75 | 10.00 | 8.00 | 8.00 | 20.00 | 11.65 | .15 | 31,237 | 90 |
| Wm. D. McKenzie, Springfield, Mass. | .73 | 10.25 | 8.00 | 8.00 | 20.00 | 13.00 | .20 | 31,258 | 95 |
| Robert D. Maynard, Springfield, Mass. | .60 | 10.00 | 8.00 | 7.00 | 15.00 | 15.00 | .15 | 28,595 | 100 |
| Maloney & Peterson, Springfield, Mass. | .715 | 10.00 | 8.00 | 8.00 | 22.00 | 14.00 | .20 | 31,181 | 85 |
| Clapp & Shipman, New York, N. Y. | .50 | 10.00 | 8.00 | 8.00 | 9.60 | 9.60 | .15 | 25,653 | 100 |

*Cast-iron. †Cypress wood.

PAVING.—Rockford, Ill.—We are informed that the Barber Asphalt Paving Co., North Exchange Bldg., Chicago, has been awarded the contract for asphalt paving at $1.73 a sq. yd.; concrete foundation 6 ins. deep, 43 cts. a sq. yd.; excavation, 1 ct. a cu. yd.; guarantee, 7 years. G. Mamioli, Rockford, has been awarded the contract at 90 cts. a sq. yd. for brick paving. There will be a foundation with 6 ins. of concrete and 1-in. of sand.

TRUNK SEWER.—Wallingford, Conn.—Baker, Banker & Co., Gloversville, N. Y., submitted the following lowest bids Aug. 2, 1898, for constructing the brick sewer, as advertised in Engineering News: 24-in. pipe, $1.30 a ft.; 30-in. pipe, $2.00 a ft.; manholes, $40.00 each; 6-in. pipe, 20 cts. a ft.; rock excavating, $3.00 a cu. yd.; iron pipe, $3.90 a ft.; masonry, $13.00 a cu. yd.; dirt filling, 30 cts. a cu. yd.; rubble masonry, $4.00 a cu. yd.

Bids Received at Kingston, N. Y., July 9, 1898, for Constructing an Underground Crossing.

| Bidder. | Time limit. | Excavation—Earth, 11,000 cu. yds. | Loose rock, 1 cu. yd. | Concrete, Solid rock, 1 cu. yd. | Masonry—Bridge, 600 cu. yds. | Rub'le, 1,000 cu. yds. | Brick, 700 cu. yds. | White glazed brick, 20 sq. yds. | Blue-stone coping, 85 lin. ft. | 12-in.* t. c. pipe, 145 lin. ft. | Laying—12-in. t. c. pipe,† 1,300 lin. ft. | 12-in. t. c. pipe,§ 650 lin. ft. | Steps, complete in place. | Brass hand rail, in place. | Structural steel, 92 tons, cts. | Asphalt filling, 15 cu. yds. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S. W. Frescoln, Reading, Pa. | 60 days | $0.60 | $1.00 | $2.00 | $3.00 | $3.50 | $7.00 | $4.25 | $2.00 | $0.21 | $0.26 | $0.90 | $170.00 | $50.00 | 2.6 | $8.00 | $22,785 |
| E. M. Haines & Co., Rhinebeck. | 100 wrkg days. | .50 | .60 | 2.45 | 3.00 | 7.50 | 4.00 | 7.00 | 7.95 | 2.35 | .17 | .37 | .95 | 225.00 | 80.00 | 3.0 | 4.00 | 25,724 |
| McHale & Co., 258 B'way, N.Y. | 3 months | .50 | .55 | 1.00 | 4.05 | 8.00 | 4.50 | 7.15 | 4.05 | 2.15 | .18 | .25 | 1.35 | 185.00 | 135.00 | 2.7 | 14.00 | 26,729 |
| Houston Const'n Co., Phila, Pa. | 80 wrkg days. | .45 | 1.20 | 1.50 | 3.00 | 9.35 | 4.50 | 7.50 | 6.00 | 3.18 | .22 | .12 | 1.08 | 240.00 | 160.00 | 3.0 | 16.50 | 27,697 |
| Owego Bridge Co., Owego, N.Y. | 90 " " | .375 | 1.00 | 3.00 | 4.50 | 8.50 | 4.00 | 15.00 | 10.00 | 3.00 | .20 | 1.25 | 2.25 | 400.00 | 60.00 | 3.0 | 15.00 | 27,718 |
| Frank Pidgeon, Saugerties, N.Y. | 60 " " | .45 | 2.00 | 3.00 | 5.00 | 9.00 | 4.00 | 10.00 | 7.25 | 3.00 | .30 | .30 | .80 | 325.00 | 130.00 | 3.0 | 3.00 | 28,131 |
| Campbell-Dempsey & Mitchell. | 100 " " | .50 | .25 | .10 | 4.50 | 8.00 | 4.50 | 6.00 | 7.50 | 2.60 | .20 | .40 | 3.00 | 250.00 | 150.00 | 2.75 | 13.50 | 28,617 |
| A. S. Traub, 146 W. 126th St. | 50 " " | .65 | 1.00 | 2.00 | 4.00 | 8.00 | 4.00 | 12.00 | 7.00 | 2.75 | .17 | .30 | 2.50 | 250.00 | 50.00 | 2.6 | 6.00 | 28,802 |
| Monty, Higley & Co., Sandy Hill | 70 " " | .50 | 2.00 | 4.00 | 4.50 | 8.75 | 4.55 | 7.50 | 5.00 | 2.25 | .20 | .50 | 5.00 | 200.00 | 90.00 | 2.3 | 10.00 | 29,549 |
| D. O'Connell & Son, Holyoke. | 90 " " | .57 | 2.00 | 5.00 | 4.00 | 9.00 | 4.50 | 7.00 | 7.56 | 3.00 | .15 | .25 | 3.75 | 250.00 | 100.00 | 2.5 | 8.00 | 29,560 |
| Assurance Const'n Co., N. Y. | 70 " " | .75 | 2.00 | 4.00 | 4.05 | 8.00 | 3.75 | 9.50 | 6.00 | 2.25 | .25 | .195 | 1.70 | 200.00 | 100.00 | 2.8 | 15.00 | 29,571 |
| Drake & Stratton Co., New York | 80 " " | .60 | 1.00 | 3.50 | 4.50 | 8.00 | 6.00 | 10.00 | 6.00 | 3.00 | .30 | .50 | .75 | 275.00 | 100.00 | 3.0 | 2.00 | 29,777 |
| P. F. Curran, 48 Dey St., N. Y. | 110 " " | .60 | 1.50 | 3.00 | 4.80 | 7.50 | 6.50 | 15.00 | 7.00 | 2.50 | .15 | .25 | 1.68 | 200.00 | 162.50 | 3.0 | 14.00 | 30,334 |
| M. J. Kennedy, Brooklyn, N. Y. | 50 " " | .92 | 2.00 | 2.50 | 4.75 | 7.50 | 5.50 | 10.00 | 5.00 | .80 | .20 | .25 | 1.00 | 188.00 | 140.00 | 2.5 | 7.00 | 31,171 |
| P. H. Harrison & Co., N. Y. | 40 " " | .55 | 1.00 | 1.50 | 5.00 | 10.00 | 5 50 | 8.00 | 5.06 | 1.40 | .20 | .75 | 2.00 | 200.00 | 200.00 | 3.5 | 3.00 | 32,629 |
| H. M. Dowd, Orange, N. J. | 90 " " | .75 | 3.00 | 8.00 | 4.50 | 10.00 | 5.00 | 15.00 | 2.50 | 2.00 | .20 | .60 | 5.00 | 300.00 | 75.00 | 3.0 | 3.00 | 35,359 |
| Avrezzana & Kolmeyer, N. Y. | 45 days | .38 | 10.00 | 10.00 | 5.00 | 11.50 | 5.50 | 10.00 | 20.00 | 4.00 | 2.50 | .01 | .01 | 400.00 | 85.00 | 4.0 | 5.00 | 36,213 |

*Furnishing. †Shallow trench. §Deep trench.

BRICK PAVING.—Detroit, Mich.—James Grant has been awarded the contract for brick in Congress St., at 87 cts. a sq. yd.; total, $4,473. The brick will be furnished by the city.

IMPROVING STREET.—Cincinnati, O.—We are informed that the following bids were received Aug. 2 for improving Western Ave., from Hopple St. to the north corporation line; contract awarded M. T. Flynn; A. B. Rattermann, Pres. Bd. City Affairs; T. B. Punshon, Ch. Engr.; John D. Harris, Asst. Clk.:

BRICK PAVING—Meadville, Pa.—We are informed that Peter Schenck, Butler, Pa., has been awarded the following contract for paving with Park fire clay brick, wire cut and Meadville sandstone, as advertised in Engineering News: Paving, $1.25 a sq. yd.; flagging, natural or sandstone and curbing, 2,170 ft., 5 and 6 ins. × 22 ins., 40 cts. a ft.; edgestone, 100 ft., 4 × 18 and 2½ × 12 ft., 33 and 25 cts., respectively; cast-iron gutter plates, 750 lbs., 1¾ cts. a lb.; two standard catch basins, $3,000 each; 12-in. storm sewer, 120 ft., 40 cts. a ft.; 100 ft. of 10-in. sewer, 35 cts. a ft.; total, $4,958.

Bids Received at Cincinnati, O., Aug. 2, 1898, for Improving Western Ave.

| Quantities. | | A. J. Henkel & Bro., 621 Main St. | M. T. Flynn, 1262 Chase Ave. | G. P. Walker, 621 Main St. | D. Folz Asphalt Paving Co., 8th & Plum. | W. Fogarty, 3550 Burnet Ave. | F. Folz, 8th and Plum. | H. Dieckomeier, 209 15th St. | Delaney & Broerman, 1139 W. 6th. | Van Sandt & Meeds, 60 Atlas Bnk Bldg. | O. E. Robinson, 4047 Hamilton Ave. | J. M. Quill, 1052 Pine St. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Broken stone | 3,800 cu. yds. | $1.85 | $0.95 | $1.35 | $1.15 | $1.25 | $1.25 | $1.19 | $1.15 | $1.15 | $1.25 | $1.40 |
| Concrete | 50 " " | 2.75 | 2.50 | 3.00 | 3.00 | 3.00 | 3.00 | 4.00 | 3.00 | .01 | 2.00 | 3.00 |
| Coping | 90 lin. ft. | .75 | .75 | .70 | .65 | .75 | .60 | .70 | .60 | .85 | .50 | .60 |
| Crossings | 475 " " | .40 | .40 | .50 | .52 | .50 | .45 | .40 | .45 | .80 | .50 | .45 |
| Curbs | 5,662 " " | .50 | .47 | .55 | .50 | .50 | .50 | .50 | .50 | .60 | .50 | .52 |
| Circular | 95 " " | .75 | .75 | .80 | .75 | .75 | .60 | .90 | .75 | .90 | 1.00 | .52 |
| Drain pipe | 200 " " | 1.00 | 1.24 | 1.00 | 1.30 | .75 | 1.00 | 1.25 | 1.00 | 1.10 | 1.00 | 1.00 |
| Drain pipe | 240 " " | .40 | .40 | .50 | .60 | .25 | .30 | .60 | .50 | .60 | .25 | .40 |
| Gutters* | 780 " " | .70 | .60 | .75 | .80 | .65 | .80 | .70 | .60 | .75 | .80 | .70 |
| Flag'g gutt'rs | 4,882 " " | .45 | .40 | .50 | .50 | .50 | .50 | .42 | .45 | .55 | .50 | .49 |
| Grading | 17,000 cu. yds. | .01 | .14 | .20 | .20 | .15 | .12 | .23 | .16 | .21 | .25 | .17 |
| Masonry: | | | | | | | | | | | | |
| Brick | 102 " " | 7.00 | 7.00 | 8.00 | 7.23 | 10.00 | 5.50 | 8.00 | 7.00 | 7.00 | 5.00 | 7.00 |
| Vit. brick | 31 " " | 10.00 | 9.00 | 12.00 | 11.60 | 15.00 | 9.00 | 12.00 | 9.00 | 12.00 | 7.00 | 9.00 |
| Uncoursed | 230 " " | 3.00 | 2.50 | 3.00 | 3.00 | 2.25 | 3.00 | 3.50 | 2.50 | 2.75 | 3.00 | 3.50 |
| Limestne pvg | 50 sq. yds. | .60 | .50 | .80 | .68 | .25 | .60 | .30 | .50 | .65 | 1.00 | 1.00 |
| Rolling | 19,100 " " | .02 | .025 | .03 | .03 | .03 | .02 | .03 | .03 | .025 | .05 | .03 |
| Gravel | 543 cu. yds. | 1.00 | .60 | 1.25 | .85 | 1.10 | .97 | 1.25 | .50 | 1.00 | 1.25 | .95 |
| Well plates | 4,000 lbs. | .025 | .03 | .02 | .025 | .05 | .02 | .04 | .02 | .035 | .04 | .03 |
| Total | | $16,305 | $14,386 | $18,766 | $17,552 | $17,201 | $15,981 | $18,212 | $15,912 | $18,805 | $18,894 | $17,912 |

*Flagging and laying gutters.

ASPHALT PAVING.—Cincinnati, O.—The following bids were received Aug. 4, 1898, for asphalt paving in Bates Ave., from Colerain to Spring Grove Ave.; bid of Southwestern Alcatraz Asphalt Paving & Construction Co. accepted:

| Quantities. | | Warren-Scharf Asphalt Pav'g Co., New York. | Southwestern Alcatraz Asp. Pvg. & Const'n Co. | David Folz Asphalt Paving Co. |
|---|---|---|---|---|
| Curbs | 1,650 lin. ft. | $0.65 | $0.88 | $1.05 |
| Resetting | 24 " " | .25 | .05 | .20 |
| Grading | 7,000 cu. yds. | .36 | .25 | .35 |
| Repaving | 40 sq. yds. | 1.00 | .50 | .80 |
| Asphalt | 2,735 sq. yds. | 2.28 | 1.67 | 2.30 |
| Total | | $9,874 | $7,791 | $10,510 |

ARC LIGHTING.—Parsons, Pa.—Thos. M. Thomas, Clk., writes us that the Keystone Electric Construction Co., Tunkhannock, Pa., has been awarded the contract for furnishing this city with 20 2,000-c.p. arc lights for five years, at $77 a light a year.

LAYING WATER PIPE.—Boston, Mass.—The metropolitan water board awarded the following contract Aug. 9, 1898, to Bruno & Salamone, East Boston, for laying water pipe in a portion of Section 9: Laying 3,060 lin. ft. of 48-in. cast-iron pipe, at $1.79 a lin. ft.; 5 ft. of 16-in. cast-iron pipe, $1.00; 5 cu. yds. rock excavation above grade, 1 ct. a cu. yd.; 1 cu. yd. of rock excavation below grade, 1 ct.; 10 cu. yds. earth excavation below grade, $1.00; setting 2 air valves, at $3.00 each; 2 chambers for air valves, $45.00 each; 10 cu. yds. of concrete masonry, $4.00 a cu. yd.; total, $5,628.

## INDUSTRIAL NOTES.

THE EASTERN PAVING BRICK CO., Catskill, N. Y., has a contract from the city of Paterson, N. J., for 1,500,000 vitrified paving bricks. The company, it is said, has a large amount of work on hand.

THE HAZARD MFG. CO., Wilkes-Barre, Pa., and 50 Dey St., New York, reports that it is now manufacturing all sizes of hard and soft drawn copper wire, and also round "figure 8" trolley wire, and can furnish any size promptly.

THE HOLYOKE MACHINE CO., Holyoke, Mass., has the contract for water wheels and iron work for the new 10,000-HP. power plant of the Columbus Power Co., Columbus, Ga. Mr. W. C. Whitner, of Columbus, is the designing engineer.

THE A. S. ALOE CO., St. Louis, Mo., advises our representative that in addition to manufacturing its own transits, levels and general engineering instruments, it also makes a specialty of buying and selling all kinds of second-hand instruments and carries in stock standard makes of engineering supplies of all descriptions.

THE PLUEGER & HENGER MFG. CO., St. Louis, Mo., has a contract from that city for 400 fire hydrants. It has also opened a Tinning Department, making a specialty of tinning on grey iron, something that, it claims, has not been accomplished successfully there before, and has met with the best results, having secured already some large contracts for this department.

THE SARGENT CO., Chicago, states that it has been running its open-hearth steel plant for the past few months at its full capacity on several large contracts, among which is one for the castings of 10-in. gun carriages for the U. S. government. The company claims to have been very successful in this class of work, readily meeting the physical tests prescribed by the government, as well as the short delivery, which is demanded in most cases.

THE FRONTIER IRON WORKS, Detroit, Mich., reports the following among recent shipments of Frontier tandem and gasoline engines: One 60-HP. for a 600-light village electric light plant, Norway, Mich.; one 40-HP., Bay City, Mich.; one 40-HP., Ogdensburg, N. Y.; one 40-HP., and several 20 and 25-HP. engines, the same type, Wichita Falls, Kan. The company claim for this engine a regulation equal to that of a steam engine, adapting it to electric lighting and similar duty at a decided economy of fuel and attendance.

THE CHICAGO PORTLAND CEMENT CO., Chicago, is said to be building a new plant for the manufacture of cement, at Oglesby, Ill., to replace the works at Hawthorne, Ill., which were destroyed by fire last February. The buildings are reported as to cost over $60,000, and the new machinery $100,000. The main building of steel and concrete will be 300 × 125 ft, and three stories high. A 70 × 250-ft. stock house, a 60 × 70-ft. boiler house, a 60 × 70-ft. engine house and a 50 × 80-ft. office building, three stories in height, will also be built, in addition to several smaller buildings. The officers of the company are: Pres., Norman Fraser; Vice-Pres., David R. Fraser; Secy. and Treas., Ralph Gates.

**Contract Work Should Always be Advertised in a Paper Read by Contractors.**

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